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PHLEBITIS FOLLOWING ABDOMINAL AND PELVIC OPERATIONS.*

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The subject of phlebitis following abdominal and pelvic operations is of considerable interest, especially so as the ætiology is not well defined nor understood. And, although it is not common, still it is not uncommon, for upon making inquiries, it is found that cases have occurred in the practice of not a few, although some of them may not have appeared in print. I can readily conceive of many factors directly or indirectly assisting in the development of the conditions favorable to its appearance, particularly if there is any predisposition to circulatory irregularities, which predisposition cannot always be anticipated nor determined. It is after the occurrence that the physician is at a loss definitely to account for its appearance. It may depend upon a poor circulation, a weak heart, an anemic condition, or a blood dyscrasia, some kidney or liver disturbance or myocardial affection, inefficient or diseased valves, or perhaps varicosity, dependent upon some preceding puer-

peral or other condition, or traumatic influences, or sepsis general or local. Indeed, all diseases of the veins tend to cause thrombosis, whether the inflammation be caused by traumatism as from ligation or bleeding, by changes in the circulating blood or sepsis in the same. When the current of blood is slowed the walls become more or less in contact with each other or weak, fibrin may be deposited on the walls, and a thrombus readily forms. Whether phlebitis be plastic or purulent, whether it be due to gout, fever, or to a constitutional condition, or more often from injury, from the extension to the vein of a perivascular inflammation, or from a thrombus or an embolism,—in any case, the endothelial coat is implicated and the process is either arrested or it progresses with the formation of a clot and the various phenomena that accompany the process.

But there are cases in which the physician is unable to satisfy himself of the presence of any of the preceding factors in a given case. Leunan-

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der states that thrombus of the superficial or deeper veins of the lower extremity, sometimes of the main trunk of the femoral veins and the external iliac, may follow laparotomies and radical operations for hernia with normal healing.

It occurs more frequently in women than in men. More often the veins of the *left* side are affected. Van der Veer thinks that the anatomical distribution of the veins on the left side, as in varicocele, may have a bearing upon the pathology of these cases.

It has followed operations in the abdominal and pelvic centers on the liver, gall-bladder, uterus, uterine appendages, appendix or intestines, for the removal of tumors, fibroids, etc.

It appears between ten days to three weeks, and sometimes later than this, after operation. Recovery is more or less prolonged, from three weeks to three months, and even longer.

Tight bandaging may have something to do with its appearance in the possibility of compression of the returning veins by the dressing.

So also is constipation given as a cause. Ether also is mentioned as a possible cause with a high pelvic position in the course of operation with slowed blood pressure. Some writers believe that infection is the chief etiological agent; some that auto-infection may be a factor.

Van der Veer reports cases, as do Strauch, Fred Lange, Willmeyer, Mayo, Leunander, Welch and others. I have heard of several in this city. In my own practice but one has occurred, following an appendectomy in

a woman on the tenth day after the operation and the day following the removal of the sutures. At no time was there evidence of the presence of pus, the temperature reaching but 100° on the third or fourth day. Chloroform was used, and no rough handling of parts. Nor was there much swelling of the leg (*right*), though the pain along the course of the femoral and crural veins was severe, and the redness quite apparent. The course of the disease has been long and tedious, as the symptoms of phlebitis lasted fully eight months, which were followed by all the symptoms of neuritis, the pain being present in almost every part of the extremity, particularly in the heel and ball of the foot, and the under surfaces of the toes.

Rest was enjoined, and the applications of heat made. Very little improvement followed the various lines of treatment with the exception, perhaps, of baking, which was persisted in for several months. At present the patient is slowly (very slowly) improving, massage and passive motion being practiced. Each case must be treated according to the indications. The general health must not be overlooked; tonics administered; heart strengthened; elastic bandage applied. I am impressed with the thought that perhaps passive motion and massage can and should be resorted to at an earlier period in some of these cases than is usually indicated.

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THE SEBORRHOIC PROCESS.*

BY JOSEPH GRINDON, M. D., St. Louis.

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When man directs his mind to the observation of a certain class of phenomena he soon perceives the possibility and the desirability of arranging these into groups. Next he notices the existence of characters common to two or more groups, which are thus made members of a more comprehensive class. Thus there comes into existence a classification, which constantly develops, its development proceeding in a direction inverse to that of the growth of a tree, the latter being from the trunk toward the branches, while in the former the process is centripetal, beginning at the terminal ramifications.

Meanwhile the tree of knowledge continues to put forth new twigs and leaves, from which there results two opposite tendencies in the increase of our knowledge. The one is a matter of apprehension, the other of comprehension. The one introduces greater complexity, the other tends toward simplification. And paradoxical though it may seem, the greater simplicity grows out of the complexity and could not proceed without it. Facts apparently far apart may be found to be but different examples of a common process when new observations are recorded in sufficient number to bridge the space between them, or to bring their limits so close as to permit of our seeing back to the point where the lines diverge.

The science of dermatology furnishes many examples in illustration

of what has just been said. It required the wide observation and keen logical faculty of a Hebra to show us that an erythematous patch, a crop of papules, a group of vesicles or pustules, or a scaling or a crusting surface might be but forms of a common catarrhal process. Thus the meaning of the term "eczema" suddenly took on such comprehensiveness as to be really a new concept. Thus a Dühring sorted out from the heterogeneous heap of bullous affections the materials which he arranged into his dermatitis herpetiformis, an achievement which remains a monument to his infinite patience and deep insight. Of special interest and value is it when the relations discovered are of a genetic, that is, etiological sort.

I shall this evening invite your attention for a brief space to an instance in which phenomena superficially dissimilar are yet fundamentally related. I shall choose my materials from amongst the veriest commonplaces of the subject.

Let me enumerate the following conditions: Oily seborrhœa, dandruff, seborrhœic eczema, baldness of the common type, alopecia areata, rosacea, blackheads, acne, styes, boils, carbuncles, epithelioma. At first sight this appears but a heterogeneous list of titles. Do these affections own any etiological relationship?

The question is one to which a final and wholly satisfactory answer cannot be given in the present state of our knowledge; especially since conclu-

* Read before St. Louis Medical Society.

sions confidently put forth in Hamburg are as positively denied in Paris. We may, however, spend profitably a part of an evening in reviewing the best opinions on the subject. I shall try to spare you technical details and to keep as close as possible to the real meat of the matter. If I seem at times dogmatic it is only because the necessary limitations of this paper will not permit of a discussion of all the different views which have found advocates.

Perhaps as good a plan as any for our present purposes will be to describe a hypothetical case, beginning with the initial condition and watching the successive development of affections with which it is, or is asserted to be, genetically related.

A child in the early teens, let us suppose, begins to show an oiliness of the scalp, noticeable to the touch when the fingers are run through its hair, and to the eye by an unctuous look which deepens the normal shade of its poll. In marked instances the long hairs adhere in elfish strands. At short range a nauseous rancid odor is distinguished.

This is *seborrhœa*, distinguished by all of the older and some of the modern writers as *seborrhœa oleosa*. It is, according to general opinion, a functional disorder of the sebaceous glands which furnish a secretion of greater fluidity and in greater quantity than the normal. This change, says Sabouraud, the learned Parisian, is due to an infection of these glands by a micro-bacillus, which he finds in pure culture within the gland.

Unna, of Hamburg, not only denies that the micro-bacillus is other than an innocuous resident of the gland,

but takes ground radically opposed to all former conceptions of *seborrhœa*. He teaches that the sebaceous glands are in no wise concerned in the process, but that the oily matter is an output of the sudoriparous, or as they are better called, coil glands. Consistency obliges him to discard the term *seborrhœa* and to substitute that of *hyperidrosis oleosa*.

While all admit that the coil glands under certain circumstances, and in certain situations (*e. g.*, the palms and soles, from which sebaceous glands are absent) furnish a proportion of oil, yet the older views, both as to the functions of the cutaneous glands and as to the true nature of *seborrhœa*, still meet with general acceptance, and to my mind have all the weight of evidence on their side.

Dismissing, for the present, the question of the true nature of the process, let us ask how it began.

The accumulation of dried sebum on the vertex of infants is familiar to all as one of the conditions, included under the vague and unscientific term *milk crust*. This, however, is a physiological *seborrhœa*, and does not come under the head of the present enquiry. While it may serve as the nidus of an eczema, I doubt that it is ever the starting point of a pathological *seborrhœa* extending into childhood proper as distinguished from infancy.

The true origin of pathological *seborrhœa* I believe to be in infection through the medium of the hair-brush. Mothers, if not habitually, at least occasionally, use their own brushes on the heads of their children, and thus, according to Sabouraud, transmit the micro-bacillus of *sebor-*

rhœa. Here is a practical point. Adults as well as children should be taught to hold the hair-brush as sacred as the tooth-brush. The frequent washing and occasional disinfection of the hair-brush is another point, the importance of which will become more apparent as we proceed to unroll our drama.

Soon certain anatomical changes become visible. The sebaceous ducts become relaxed and patulous, and are visible as small, black dots, from which a minute droplet of oily fluid may at times be expressed.

After a time the infection travels to the face, giving us the shining nose, with somewhat less glossy patches a little below the orbits and on the forehead. The skin has a muddy, dirty look, even in individuals who devote considerable time to the care of their person. Lateral compression of dilated ducts forces out a worm-like roll of a soft, creamy consistency, composed of a partially inspissated sebum mixed with epithelial *debris*, cells which have not completely undergone fatty metamorphosis.

A brief step farther and we have the fully constituted blackhead or comedo, a blemish at times so disfiguring us to poison the youth and even mar the prospects of many young persons, especially those of that sex which counts personal attractiveness as an important asset.

The sebaceous gland itself is but little affected morphologically, but its duct is enormously dilated as well as lengthened, and harbors a mass of hyperplastic epithelial elements. At the mouth of the duct certain pigment changes, also seen in forms of excessive epithelial proliferation in other

situations, produce a black, blue or brown deposit, the black-head itself, from which the whole of the little mass takes its name, and which is usually erroneously ascribed to the incrustation of dirt. I do not mean here to deny that neglect of ordinary cleanliness may not favor the development of comedones, but I gravely question whether plugging of the duct from without is a causative factor.

Let us for a while return to the scalp. The excessive oiliness may have become complicated with epithelial proliferation, as occurred on the face, but in the former situation it appears, not as blackheads, but as a layer of varying thickness, of the color of yellow wax, and of the consistency of that substance when slightly warmed. If the epithelial element predominate largely over the oily layer this may be more gray than yellow. The condition is still reckoned a seborrhœa, although modern opinion tends more and more to hold that inflammatory change, evident to the microscope, has commenced. To the unaided eye it is absent.

Meanwhile the hair follicle, intimately united as it is both anatomically and physiologically to the sebaceous sac, has not escaped unscathed. The presence of the invading bacteria has furnished a fat-splitting ferment, giving rise to butyric acid, whose rancid, nauseous odor was referred to earlier in this sketch. This acid, or perhaps some toxin, determines an increased but unhealthy activity of the hair-forming cells covering the nutrient papilla, which soon finds expression in a diminished vitality. The life of the affected hair is shortened, and it falls out. Soon, however, its

place is taken by a new hair, which, handicapped by the unfavorable circumstances of its bringing forth, and finding a more securely intrenched foe to contest its claim to life, falls an early victim, to be succeeded by a third appendage still more puny. So the unequal struggle fares, until the scalp, gleaming whitely through a few short, thin and light-colored hairs, shows where the oncoming tide of baldness, creeping stealthily but remorselessly, spreads its ever-widening margin from the crown or drives its wedge upward from the temples until it extends the boundaries of the forehead and thus counterfeits the aspect of wisdom. How much, indeed, of the venerable appearance of age is not due to the micro-bacillus of seborrhœa?

The depletion of the scalp progressing, there is ultimately produced in severe cases the true billiard-ball effect, a fringe of survivors usually holding out to the last around the occiput from ear to ear. The devastated area takes on a characteristic brilliant polish, due to the fact that while the hair follicle has wasted, its annexed oil-gland has enlarged and multiplied the complexity of its acini, and is thus prepared to furnish an increased unctuous discharge.

Sabouraud believes that not only the common type of baldness, but also that special form known as alopecia areata, is due to this organism. A consideration of this subject would lead us too far afield. I shall only say that his views have not met with general acceptance in this particular, and that the enormous majority of cases observed in this country are evi-

dently due chiefly to impaired nerve-supply.

Another condition of the scalp here calls for notice, although its connection with our subject is problematical and most difficult to define. I refer to the common affection known as dandruff or pityriasis capitis. It was at one time oftenest called seborrhœa sicca, a term now falling into merited disuse. I hold with Sabouraud that there is no such thing as a dry seborrhœa, a view in which all, perhaps, would not agree. I believe dandruff to be an infectious, mildly inflammatory disease, which may or may not, co-exist with seborrhœa. Certain high authority to the contrary notwithstanding, I am unconvinced of its possessing any etiological relation to baldness. I know many middle-aged men whose fine heads of hair have been full of scale for the last thirty years.

Unna holds that dandruff is the mildest expression and oftenest the initial stage of his *seborrhœic eczema*. Personally I am far from being persuaded that all dandruff is seborrhœic eczema. I still hold to the existence of a simple pityriasis capitis, although I confess that I can only distinguish between the two by the later history of the case viewed as a whole.

Be that as it may, it seems probable that there exists some relation between seborrhœa and seborrhœic eczema. The latter disease owes its qualifying title solely to the greasy feel of its scales, since both Unna and his opponents are agreed that it does not implicate the sebaceous glands. Unna believes that the coil glands are specially involved, but

many competent investigators have failed to corroborate his findings. Seborrhœic eczema thrives best in the same situations as does seborrhœa. The most reasonable conclusion to date seems to be that seborrhœa prepares the soil for the infective agent of seborrhœic eczema, whatever that may be. Unna thinks he has found it in his *morococcus*, an organism which most Americans recognize as the *staphylococcus epidermidis albus*, described by Welch in 1891, and to which they deny any such morbid influence as Unna claims.

Seborrhœic eczema may be briefly described as a superficial inflammatory disease, developing by preference on a seborrhœic base, characterized by symmetry, a tendency to the annular configuration, with sharp outlines, by its staining the skin of a light fawn color and by its being attended with relatively slight itching. It may simulate a scaly, less often a moist or even a papular eczema. Again, it at times so closely counterfeits psoriasis that some have been led to believe in the fundamental identity of the two diseases.

But seborrhœic eczema is not the only disease which, by thriving on a seborrhœic soil, is in turn modified by it. Syphilis often shows the seborrhœic impress, and the annular configuration occurring in that disease finds its finest examples on such a soil. The extension of a scaly lesion from the scalp to the forehead in the shape of a band, formerly called the *corona veneris*, and considered symptomatic of syphilis, is really much more characteristic of

seborrhœic eczema, and is better called the *corona seborrhœica*.

But let us return again to the young patient whom we left with a crop of blackheads on his face and perhaps as well on his shoulders and back.

The condition has probably taken on an additional development by the appearance of a peri-glandular inflammation, constituting the common disease acne. This disease is closely united to comedo etiologically. It is rare for either condition to exist 'without the other.' That acne is due to a secondary infection on a seborrhœic base, favored by but not demanding certain systemic conditions, there can be little doubt. Just what that secondary infection may be is not so certain. Is it one of the ordinary pus cocci, probably *staphylococcus epidermidis albus*? So say some, and so Sabourand's observations would seem to show, although he does not describe the organism by that name, but as "a coccus producing grey cultures." Unna's *morococcus* is again apparently the same thing. But Unna does not believe that the *morococcus* is the cause of acne, but prefers to assign to it the role of exciter of his seborrhœic eczema. On the other hand, he believes that acne is caused by a small bacillus which is very likely the same as Sabourand's seborrhœa bacillus, to which the latter investigator in turn denies that role, as we have just seen. Others again, such as Gilchrist, believe that the presence of the above bacteria is accidental, and look upon one or another special organism as the true cause.

But, however these views may vary,

the central fact which I wish to impress upon you remains unaffected; namely, that every case of acne postulates an antecedent seborrhœa, and that only by a recognition of this fact can we hope to successfully manage our cases. While it is true that gastric and intestinal derangements, dietary irregularities, menstrual disorders, and other depressing influences have their effect in the way of lowering cutaneous resistance, thus aggravating the disease, and therefore call for intelligent treatment, yet we must remember that none of these causes alone, nor all of them combined, could ever produce a case of acne. Seborrhœa is the *sine qua non*, and against it should our measures be chiefly directed.

Acne necrotica, also known as acne varioliformis, is a peculiarly inveterate form of the disease, possessing characters sufficiently distinctive to entitle it to recognition as a separate clinical entity. According to Sabouraud, it is due to infection of the immediate environs of a gland affected with seborrhœa with the staphylococcus *p. aureus*. It seems likely that a special soil is required for its development.

Middle-aged women, men of various ages who own convivial tastes, and certain other individuals, sometimes develop a bluish-red diffuse blush of the nose, and often of the chin and forehead as well, constituting the first stage of rosacea, later there is vascular hypertrophy, visible to the naked eye and constituting the second stage, while the third stage is reached when the neighboring tissues take part in the hyperplasia, thus sometimes producing marked deformity.

A diffuse vascular hypertrophy may appear late in life in an otherwise healthy skin, but I believe with Unna that true pathological rosacea is always the result of seborrhœa. It may or may not be complicated with acne. We have here another phase to add to the growing list of conditions growing out of the seborrhœic process.

I admit that boils, and less often carbuncles, may develop in a skin free of seborrhœa, but feel certain that we have here at least a frequent pre-disposing factor.

Professor Hardaway, in his admirable treatise, points out the relation between sty and seborrhœa. Certain cases which defy treatment directed against refractive errors can be cured by attention to the scalp. While the fundamental condition of seborrhœa is the first to make its appearance, it also persists after many of the conditions to which it gave rise have had their day. The growing seborrhœic impress is as marked a feature of old age as are wrinkles or bleached hair. After middle age it becomes associated with other lesions of a degenerative type, giving an unctuous character to the keratosis senilis, or flat warts, seen on the faces, backs and hands of the old. That these areas of degeneration often serve as starting points for epithelioma is a matter of common observation. As the hour is late and the subject presents many difficulties, I shall content myself here with this mere allusion.

We have, therefore, in the seborrhœic process one which, commencing almost from the cradle, may extend to the grave, which, viewed as a

whole, presents a basic condition on which may be engrafted many offshoots, and one which, unless it be understood and combated, will perpetuate the growth of its branches and put forth new ones. While I have dealt here only in the commonplaces of the subject, I hope that this bird's-eye view of the group may be

suggestive to those among us who are not already familiar with this branch of our science, which hope, I trust, may be taken in extenuation of my offense in inflicting upon you a paper which has somehow grown to be much longer than I originally intended.

REPORT OF A CASE OF HYDROPHOBIA.* (RABBIES).

By B. A. WILKES, M. D., St. Louis.

In reporting a case of hydrophobia to you this evening I do not presume to advance any original or new ideas or suggestions as to the history, pathology, prevention or cure of this much dreaded disease or infection.

In looking up the subject I find but little English literature on the history or pathology of the disease, but there is no doubt that the disease is infectious, and can only be transmitted by a mad animal.

I do not believe, as yet, the bacillus or germ theory of the infection has been conclusively established. Spenelli, Rivolta, Foll, Ferran and others have detected and described a bacillus which they believe to be the true one.

The rarity of the disease, and the fatality which has attended its treatment for generations past, make each case all the more important and instructive.

Up to the time of Pasteur's investigation of the disease, there was no remedy that would offer any hope to the sufferer, but, thanks to this great man of science, his preventive inocu-

lation has reduced the mortality to a wonderful degree. Pottevin gives the following summary of figures from the Pasteur Institute: "From 1886 to 1894, 13,817 persons were bitten, with a mortality of 5 per cent." We take it for granted that all these were supposed to have been bitten by a rabid animal, and if such be the case, the low rate of mortality is phenomenal, and should induce us to inoculate even suspected cases; as the affection defies all methods of treatment after development.

The following is a brief report of a case which came under my observation recently at the Missouri Baptist Sanitarium:

On January 5, 1905, Dr. Cadwalader asked me to see a case with him that had arrived on a morning train, and on entering the room we obtained the following history: Mr. H. I., aged thirty-eight years; residence, Portland, Missouri, on November 25, 1904, was bitten on the left side of the head behind the ear by a pet red fox. Two wounds were made in the scalp by the teeth, and a short distance apart, which bled freely for awhile. The wounds healed readily

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and were not cauterized or treated in any way, the patient paying no further attention to it, although the fox died on the third day after the accident. From this time the patient went on about his farm duties until January 3, 1905, when he began with a headache, more severe on the left side of the head, which continued to increase until the following morning, when Dr. A. D. Bridges, of Portland, was called to see him, and who has kindly written me the following history: "I called to see Mr. I. at 9:30 A. M. January 4th, found him in bed suffering with severe pains in the back and left side of the head, which radiated down the back and shoulders, and some nausea. Pulse, 100; temperature, 101°. Pupils very much dilated, and he was very nervous. I asked for a glass of water and placed a tablet on his tongue and then handed him a glass of water, whereupon he at once dropped the tablet from his mouth followed by several mouthfuls of frothy mucus. I repeated the effort to give the tablet with the same result. I then gave him three teaspoonfuls of water at different times and he had a convulsion after each one.

"I then held a counsel with the family in an adjoining room and obtained the history of the case, and with that and the symptoms decided that it was

a case of hydrophobia, and advised them to go at once to St. Louis for treatment."

When we examined the patient the following day, January 5th, at 11 A. M. temperature was 103°; pulse, 140. The attendants with him said he had had twelve spasms or spells from the time they left the train at the Union Station until the hour we saw him.

We ordered large doses of chloral by rectum, put on a special nurse with him and ordered the family to leave the room and perfect quiet enjoined.

The spasms became less severe until about 3 P. M. when they became worse. The dose of chloral was then increased without relief, followed in one hour with one-half grain of morphine hypodermically with no better result. We then resorted to chloroform by inhalation, which was continued through the night and until death came at 7 A. M. January 6th.

The patient was conscious all day and until about 10 P. M. of the night previous to his death. He seemed in a talkative mood most of the day but did not sleep. He made no effort to do any bodily harm to himself or anyone else, and made no peculiar sounds or noise of any kind. In a later report received from Doctor Bridges this morning, I learn the fox died with spasms and undoubtedly had hydrophobia.

PULMONARY TUBERCULOSIS, WITH SPECIAL REFERENCE TO ITS EARLY DIAGNOSIS AND HOME TREATMENT.

BY JOHN T. ANDERSON, M. D., Leeton, Missouri.

Gentlemen of the Missouri State Medical Association:

In presenting this subject for your consideration I feel that we are dealing with one of the latest of the infectious diseases, notwithstanding mankind has been a victim to this disease for centuries.

It is just within the last few years that the medical profession has had anything like an intelligent understanding of its cause and treatment.

Since Koch's discovery of the specific germ in 1880 we have been slowly building and broadening on a correct foundation, until today we are beginning to see through a glass dimly. We know at present that it is an infectious disease, highly contagious, and was becoming so very prevalent that it threatened to become an appalling plague, not only to this country, but the entire world. Prior to 1885 it killed in New York City more people than did typhoid fever, pneumonia, diphtheria, smallpox, measles, scarlet fever and cancer combined, but after twenty years of careful study and intelligent understanding of correct theory, accompanied by careful detail in technique, a great check was brought to bear on this monster's headway, so that in 1900 cancer alone killed more people in New York City than tuberculosis; but while this city has met with such marked results, the country at large has improved very slowly. "Knowledge percolates from the upper strata of human intelligence to the lower, and that not speedily;" but notwith-

standing this fact, we all know at present that tuberculosis is not any longer considered an hereditary disease in the sense it was once so considered, but it has to gain its entrance to the human system from without through some of the gateways into the body, which, in my opinion, is nearly always through the respiratory route directly to the lungs.

The germs having entered the bronchi, or carried to the air vesicles, if suitable soil conducive to their growth is present they will begin work by first adhering to the walls of bronchi or air vesicles and gradually imbedding themselves deeper and deeper into the tissues until they are in the connective tissue between the air cells. By this time, and maybe before, infection is apparent. Nature establishes an objection and calls to her aid her warriors, and a tremendous fight begins upon those intruders. She begins to encase this nest of germs first with a deposit of lymph substance, hermetically sealing the germs in a tubercle; around this tubercle a collection of fibrous tissue is created, hermetically enclosing the tubercle. If all has been well done, this may end the process. The germs will die, calcification, absorption and contraction of tissue take place; the disease is stayed or, in other words, cured.

But, on the other hand, we may not have so fortunate a termination. There may be several foci of infection, and in nature's attempt to encase so many points her work would not

be so complete, and if associated with bad hygiene, or if infected by any of the pus-producing organisms, the tubercle and surrounding tissue would undergo suppuration, and instead of a scar and a cure we have an abscess cavity with suppurating walls standing ready to infect other tubercle as well as adjoining healthy tissue; thus, repeated breaking down and reinfection may take place until a major part of a lung is destroyed or life itself is sacrificed.

This disease may attack the body and assume the following forms: Acute pneumonic phthisis, miliary or fulminating, subacute and chronic phthisis—all varieties are produced from the same germ. But the form is determined in a measure by the individual's cellular resistance through the elaboration of nature's antitoxine; also by the individual's hygienic surroundings. Of course, infection from other pus-producing organisms helps in determining the acuteness or chronicity of the case.

When a patient becomes infected with tubercular bacilli, anemia soon supervenes, a tired feeling comes on, accompanied by shortness of breath on exertion, loss of appetite, poor digestion, loss of flesh, eyes assume an unusually bright appearance, pulse is increased above normal, tongue is coated, skin loses its healthy look and irregular fever is established; cough may or may not be present in early cases, and in a great many cases cough is delayed until the disease is far advanced.

The etiology of this disease may be classed as remote and exciting; of the former there are many causes, a few important ones I will mention: A

weakening of the body through inheritance or acquirement, impure air, improper food and clothing, alcoholism, syphilis, la grippe; mental unrest, and many others. The exciting cause needs merely a mention: it is due to a specific germ. This now brings us to a very important place of this paper, namely: diagnosis. In no disease to my knowledge is it so necessary to make a correct early diagnosis as this one under consideration, if we expect to give our patients the least chance for health and life; it is for us to name the trouble and point them the way to live the rest of life's journey, and to do it early. There are so many physicians who do not come out and make a plain diagnosis and tell the patient and family from what kind of infection they are suffering, as they would do in typhoid fever or diphtheria, when they are fully satisfied in their own mind as to the infection being unquestionably tubercular. They will wait and call it lung trouble, bronchitis, or something of the kind waiting to see the germ under the microscope, and be pathognomonic before they will venture a direct and impressive diagnosis, and as a result of this waiting the patient loses his best, and many times his only opportunity to be cured. I would not detract one particle of merit from the microscope; without it, we would still be in ignorance concerning the nature and true pathology of tuberculosis, but if you wait for germs to be expectorated in order to make a diagnosis with a microscope, you have not made an early diagnosis which is so essential in this disease. The patient does not expectorate germs until the bacteria have entered the tissue of

lung cells or bronchial tubes, and nature has encased them in the tubercle. After tubercles have been formed, and if suppuration takes place, then it is that we have expectoration of purulent matter loaded with tubercular bacilla, and not until this takes place can we make a diagnosis with a microscope. The duration between infection and suppuration with expectoration of germs varies in different cases; in my experience it is from two to four months. Shall we wait all this time before arriving at a diagnosis and inaugurating the proper treatment? No. What then? Study history of the case presenting from its earliest beginning; note every symptom. To do this see your patient daily, as you would a typhoid or diphtheria infection. Investigate every organ and depend mostly upon your ears in intelligent systematic auscultation.

And, gentlemen, with what you can see and what you can hear you should be able to make a correct diagnosis several weeks at least before you could possibly do so with a microscope.

I will not mention the many symptoms that may be present to assist in an early diagnosis, but will call your attention briefly to auscultation.

In the different stages of pulmonary phthisis we may hear subcrepitant rales, crepitant rales, tubular breathing, broncho-vesicular respiration or the cog-wheel breathing. All of these abnormal breath sounds may occur in other lung affections and when present in phthisis are significant of a well advanced case. I desire to call your attention to a sound heard in early cases at the last of a very deep

and forced inspiration. I have come to look upon this sound as being pathognomonic of early phthisis and have seen it proven later by pulmonary hemorrhage and the microscope. I call this sound a musical click, it is imitated to some extent by holding a tightly stretched thread, one end between the teeth, the other between thumb and finger nail, and pick the thread with the finger nail of the free hand. Remember that in order to get this sound it may require several very deep inspirations and that it is heard best on the posterior chest at middle or lower angle of scapula; we often can get this sound long before there is any cough, and always before there is any expectoration.

Again, I desire to affirm that with careful and repeated examination of a case as to history and symptoms, with careful auscultation of the posterior bare chest we should be able to arrive at a correct diagnosis before the tubercular bacilli appear in the sputa. Our diagnosis having been made this brings us to consider treatment, and in accordance with title of paper it will be home treatment. All praise for the sanitarium treatment of phthisis. The men in this work have shown us what can be accomplished by fresh out door air in any climate, and have fully demonstrated to us that phthisis is a curable disease, but I believe that you all will agree with me that the sanitarium is not practical for a large majority of people. Imagine a young mother with two or three little children whose husband owns a small farm and is earning a comfortable living; this mother and wife becomes infected with tuberculosis; if she can remain at home, the husband can hire

a housekeeper; the family can be kept together, and the children can have a mother's advice and the husband's business will not suffer very materially; on the other hand, if she is sent to a sanitarium the family is broken up, their source of support to a great extent is cut off and when they consider these questions the mother will remain at home with her little ones and die before she will consent to break up the family. Most of the families in our entire country are so situated. What then shall we, the medical profession offer to this large class? Intelligent, modern home treatment is the only solution. The treatment of phthisis in the home is a matter of education, not only of our patients, but their immediate families as well; they must be told from what kind of infection they are suffering, *i. e.*, the diagnosis should be plain and impressive, the same as we would do in typhoid fever or dysphtheria.

The doctor should fill them with hope and confidence in the fact that phthisis is a curable disease if instructions by him are persistently followed. They must be taught that fresh air is the main weapon in the fight for a cure. They must be taught that phthisis is a very contagious disease and the patient must occupy a room as nearly as possible to himself, especially during sleeping hours. They must have their individual drinking cups and other utensils used in drinking and eating. After use they should be boiled. Bed clothing and body clothing should be changed often and boiled. If any matter is expectorated it should be burned.

Explain the reason for all this, that it is not only for the protection of

those who are not infected, but is absolutely necessary to prevent reinfection of themselves. They must be taught to take lung exercise at stated intervals during the day, expanding their lungs to the fullest extent every time; they must be told of the mechanism of this and the good that will accrue from it. The proper clothing should be prescribed, woolen or silk underwear. If the patient has fever he should be placed to bed in a room that is large and free from carpets or an undue amount of furniture, and one that can be well ventilated, and that will allow an abundance of sunlight. If this is not obtainable prescribe an extra window, or if necessary the construction of a proper room.

Teach your patients that outside air in Missouri is very nearly as good for phthisis as Colorado, and that outside air in Missouri is one hundred per cent. better than a closed room in any of the western states that are so highly lauded for the cure of tuberculosis. Teach them that it is the air and sunshine and not any particular state or section of country that cures. So long as the patient has an elevation of temperature he should be kept in bed with an open window day and night, accompanied by lung exercise at regular intervals. After temperature becomes normal they should lie out of doors when weather is fit, all day; moderate exercise, as walking or riding, will also be a benefit after patients have gained sufficient strength so that they will not become too tired. These instructions should be recited to patients three or four times a week and inquiry made to find out if they are living up to them.

By this repetition the patient becomes educated along our plans, and becomes well versed in the technique of home treatment. And as they begin to improve they will adhere more closely to your talks, providing you keep up your promptings.

Use of Drugs in Phthisis.—I believe that drugs are as potent for good as they are for harm, and, like people, it is easier to get evil effects than it is to get good results, but with their judicious use we have valuable auxiliaries in combating tubercular infection.

The alimentary canal should be kept cleaned out and as aseptic as possible to prevent autointoxication. I do not believe in stuffing a patient with large doses of nauseous mixtures at the expense of digestion simply because they have been recommended. But drugs used according to their intelligent indications, and discontinued when their purpose has been attained, are powerful for good. I will now name a list of drugs as my drug armamentarium, from which to draw as I may need: Calomel, pilocarpine, nitroglycerine, phenacetine, codeine, heroin, atropine, strychnine, nuxvomica, guaiacol carbonate, syr. hydriodic acid and creosote. The treatment of phthisis would not be complete without mentioning the cold, wet pack, or ice bag, in controlling high temperature.

I desire to affirm that all cases of phthisis can be benefited and a large majority cured in their homes if the above plans are persistently carried out by doctor and patient alike, with the co-operation of family and friends. If time permitted I should like to report a list of phthisis cases coming under my care within the past five years and treated in their homes along modern plans. Taking the cases as they came in general practice, in all stages, the results have been very nearly as satisfactory as the treatment of pneumonia, with this difference, however, when a patient suffers from a tubercular infection he is compelled to keep an eternal vigilance on his future living. If he fails to live up to the laws of health and to plans that brought about his cure the disease may be rekindled. I desire to reiterate the points in this paper: (1) Phthisis is a contagious disease; (2) phthisis is a curable disease; (3) it can be cured at home; (4) the diagnosis should be made early; (5) you must educate your patient along your plans and obtain his confidence and his co-operation; (6) fresh air and lung exercise are the agents that cure; (7) drugs judiciously used are valuable auxiliaries; (8) after the disease has been stayed or cured the patient is compelled to live ever after up to the plans that determined his cure.

THE MEDICAL TREATMENT OF APPENDICITIS.

BY EUGENE F. HAUCK, M. D., St. Louis.

A cure of any case of appendicitis by medical means is thought impossible by most surgeons at the present time, and, in a great measure, by the laity as well. Most surgeons, without hesitation, state that every case of appendicitis, typhlitis, or perityphlitis must be operated in order to affect a cure. I am one of the few that beg or dare to differ with them. I am aware of the fact that many cases do require an operation, but I also know that a large number can be permanently cured without one, and I here wish to state, as my positive opinion, that a large number of operations for appendicitis are not justified and that more harm than good results from some of these operations.

I have been practicing medicine for twenty-four years and in that time have seen and treated many cases of appendicitis.

Have seen cases that prominent surgeons had examined, and in which they stated that only an operation would prevent death, get permanently well without such operation, and these same patients are alive to-day, in good shape and with no relapses.

Surgeons operate with the idea that an exploratory laparotomy does no harm and will then remove the appendix, whether diseased or not; but unfortunately a clean abdomen is in this way sometimes infected, and suppuration takes place (where there was none before), with its many evils and after effects. Such a patient is crippled for life and might have been a well man if the knife had not been used.

I have personally seen above condition more than once, and it is this class of cases that I referred to, where more harm than good results from an operation that was not justified. This is well illustrated in an article by Dr. Ashton, in *American Medicine*, Vol. VII, No. 9, on a "New Technique in Operations for Appendicitis," in which he says: "In performing appendicectomy there is always a danger of infecting the parts surrounding the seat of operation when the appendix is amputated and opening in gut is sutured. The operator's fingers and instruments came in contact with the exposed intestinal mucous surface at seat of amputation. Many of the unexpected deaths which follow operative interference in uncomplicated cases of appendicitis as well as chronic sinuses and delayed recoveries, which results are undoubtedly due to an infection from this cause, etc., etc."

Catgut, not thoroughly sterilized and want of proper care often cause infection where none existed before.

Some surgeons recommend imagination of appendix and overlook the fact that where this occurs spontaneously (by nature) it is often the head of the column in ileocecal intussusception, and may occur if done by operator.

Errors in Diagnosis.—Dr. O'Hanlon, of New York, says, "Appendicitis belongs to a class of diseases which we often read about but seldom see in an autopsy. Again and again I know of cases where a diagnosis of appendicitis has been made on the

strength of pain in the ileac region and some gastro-intestinal symptoms, all of which promptly disappeared after a little judicious treatment.

Among 3,000 autopsies made by me during the last seven years I have only seen ten cases of appendicitis. I had forty-two cases sent me, which had been diagnosed as appendicitis, and in thirty-two of them the appendix was normal.

Other conditions, which have been mistaken for appendicitis, are the following, viz.:

Renal Calculi, cysts of right ovary, when strangulated by twisted pedicle, twisted hydro-salpinx, cholecystitis, lesions of pancreas, sarcoma of small intestines, idiopathic peritonitis, stomach and liver troubles.

Treatment.—Many medical authorities agree that medical treatment will, in a great number of cases, cure appendicitis, among them Osler, Strumpel, Sands, etc., some few surgeons also admit that it is often effectual.

A review of the cases occurring in the French army present remarkable evidence favoring the medical treatment of appendicitis. Dr. Chauvel, medical inspector of the French army, gives the following statistics: In 1902 he found 668 cases in military hospitals; 188 were treated by operation and 480 medically. Notwithstanding that, according to an eminent writer—"The medical treatment of appendicitis does not exist"—of the 480 cases treated medicinally, but five died, while of the 188 operated on, twenty-three died. These facts should not be ignored in the interest of the patient.

Mild cases often recover. Sometimes an adherent appendix is caused

by an inflammation extending to serous surfaces from pelvis; this often disappears again and even where bound down by a film of serous adhesion will do no harm. Dr. Baldy, of Philadelphia, claims that such an appendix ought not to be removed if found when operating for some other trouble.

Even in suppurative cases nature often works a better cure than an operator could do, although I believe in operating all cases where pus is undoubtedly present, and do not believe in leaving such cases to nature.

Dr. Lyon states, in *La Presse Medicale* for October 28, 1903, that the majority of cases of acute appendicitis, if seen at the beginning of attack, are amenable to treatment.

Appendicitis is due to a variety of causes, viz.: foreign bodies in appendix, fecal concretions, grape seeds, corn, cherry-stones, pins; some claim eating of too much meat and want of exercise. In Germany, often caused by splinters from earthen dishes, peanuts, la grippe, rheumatism, menstruation, and pneumonia, sometimes accompanied by pain in the appendicular region. Dr. Soupalt claims it is often found during a menstrual period, and such cases seldom require an operation. La grippe often causes abdominal symptoms resembling appendicitis. I have seen several such cases, where operation was advised by others, get well without it.

Each case has to be treated according to symptoms present; condition of patient, etc., to be considered also. Unless decided symptoms of suppuration are present, I attempt treatment about as follows: Locally either ice-bag, or, in some cases, hot

antiphlogistine, thickly applied. In some strong, robust persons leeches are excellent. Internally I give one-fourth grain of calomel every hour until bowels move freely, and, if necessary, give large warm enemata of water, and repeat them if needed in a few hours. Opium only when pain is very severe. After acute local symptoms subside I apply ichthyol externally, and now and then carminatives internally. Only liquid food is given for some time, and none at all for forty-eight hours if patient's condition allows such a course. Absolute rest in bed for some time and

great care in diet for several weeks are needed.

I have successfully treated a large number of cases in twenty-four years, and I do not recollect a single instance where I had advised against an operation that it became necessary to operate afterwards, and all of such cases also recovered. I wish here to reiterate that the stand taken by most surgeons, that all cases of appendicitis can only be cured by an operation, is wrong, and that a large number will get well without an operation is undoubtedly true. At the same time I know that many cases require an operation, and that often in a hurry, too.

PNEUMONIA.

By JOHN D. SEBA, M. D., Bland, Missouri.

When we take into consideration that the death rate from pneumonia for the past few months in the principal cities of the United States exceeds that of any other disease, we at once comprehend the importance of our subject. It has not only lead in death rate in the cities but in the country as well; sparsely settled communities have by no means been exempt from the dreadful malady. This is not to be marveled at when we consider on one hand the important part the lung plays in the physiological economy of man and the vicious micro-organisms that are infectious agents on the other, when we consider the fact that the lung is the organ by which carbon dioxide is exhaled and oxygen, without which animal life cannot exist, is not only inhaled but taken into the blood.

Then and there only does the mind conceive the width and depth of our

subject. When we speak of pneumonia we mean croupous pneumonia, the old-fashioned pneumonia, the pneumonia that always means disaster to old persons and almost all infants it attacks, and death to many young and middle-aged people.

Of all the acute infectious diseases pneumonia undoubtedly stands near the front. Cholera may sweep before it its thousands, but it visits us only once during a generation, whilst pneumonia is with us six months in the year.

Scarlatina, measles and smallpox are sometimes of malignant types, but one attack furnishes immunity against another, whilst in pneumonia one attack predisposes to another. It is rather unfortunate that the nomenclature of the various pneumonias has been so distorted and perverted. Many writers have attached to it different names, each with the explana-

tion that his better expresses the anatomical part affected and the pathological condition present. We may congratulate ourselves that as our knowledge about pathological conditions widens and enlarges, our vocabulary enables us to find suitable words to best convey to others our conceptions of the conditions as we think they exist.

Bronchial Pneumonia.—Bronchial pneumonia, or capillary bronchitis, is the most frequent form of pneumonia met with. It is most frequent in infancy and old age; adults and middle-aged persons as well, however, being subject to this disease. When middle-aged persons suffer with it, it is generally called catarrhal pneumonia; the pneumonia most frequently met with as a complication in la grippe, hay fever, and measles; and when not due to any specific germ, such as that of la grippe or measles, it is most always due to auto infection, induced by inclemency of the weather. The body is chilled by wet or damp weather. The pores of the skin are closed, the skin as an excretory organ refuses to perform its functions. The impurities created in the blood are thrown upon the mucous membranes to be thrown off. These impurities, irritating to the mucous membranes as they pass through them, cause first a congestion; second, an inflammation and a suppuration, and then gradually a normal condition is re-established, unless, as is often the case in infancy and old age especially, the case terminates fatally. If once we understand the pathological condition, the treatment, or the relief to be obtained, is easy. Eliminate the

noxious agents that are causing the trouble through the bowels, the kidneys, and the sweat glands. Just how these ends are to be accomplished, will be left for each individual to decide. This paper was not intended as an essay on broncho or catarrhal pneumonia, and can only give it passing notice. Very often the congestion and inflammation is so great in some of the smaller bronchial tubes as to cause their complete closure by cedema and swelling, preventing the air from going out of or into that portion of the lung which these tubes supply. Obstruction atelectasis results.

Traumatic pneumonia is a pneumonia caused by traumatism, such as broken ribs, contused wounds, punctured wounds, stab wounds, gunshot wounds, and sometimes a foreign body inhaled into the smaller bronchi, where it sets up a septic condition, and infects the surrounding lung tissue. As traumatic pneumonia is strictly a surgical disease, a surgeon should be called to treat it, unless the attending physician is a surgeon himself; in any event the treatment belongs to the field of surgery and will not be further discussed here.

Septic Pneumonia is a pneumonia in which the infectious agent is of a septic nature. It is most frequently met with as a complication to typhoid fever; it is wrong to call these cases typhoid pneumonia, as this term is generally applied to a low muttering and delirious pneumonia. It is always best, in speaking of pneumonia that complicates typhoid, as a typhoid complication, and not a pneumonia complication. Some of the most serious cases of septic pneumonia that

the writer has ever seen were from sequelæ of scarlatina. In these cases large amounts of blood were expectorated, and, although in the minds of my consultants these cases were ably and vigorously treated, both terminated fatally.

I wish to add, that it is the writer's opinion that, in these cases of septic pneumonia, we had a mixed infection of various pyogenic organisms. We often meet with mixed infection in diphtheria, erysipelas, etc. I wish to add that if we always knew the exact character of the infection, we could employ remedial agents that would save our patients from fatal termination of the disease.

Perambulating Pneumonia.—Of late, physicians of my section of the country have laid great stress upon perambulating pneumonia. The term is not expressive of any pathological condition; but simply expresses a condition of a predominating symptom of restlessness and nervous excitement, and wherein the patient refuses to remain in bed, but keeps on walking from one room to the other. It has been pointed out that these cases were of grave nature, and many cases terminated fatally. The fatal termination of these cases is, in my opinion, not due to a serious or deep-seated infection, but more particularly to an exhausted condition of the nervous system.

Croupous Pneumonia.—The undulterated old-fashioned croupous pneumonia is really the theme of my paper. It is the subject upon which I am to write. I am sorry that the subject, owing to its importance, was not selected for an abler essayist, a college professor, who possesses lan-

guage to portray the disease in eloquence sufficiently worthy of the subject.

The Etiology of Croupous Pneumonia has long since been established by bacteriologists to be the pneumococcus. That this bacteria is widely distributed may be inferred from the wide distribution of the disease. The development of the bacteria seems to be favored by certain climatic conditions, a damp atmosphere, a little above freezing point, seeming to be favorable to its development; whilst dry cold, or dry warm weather delays its development, or kills it altogether. The prevalence of pneumonia in damp weather with a low temperature, the absence of the disease, "when dry atmosphere, either warm or cold, exists, would lead to this conclusion. That croupous pneumonia is often due to a mixed infection, and not only to the pneumococcus is my firm belief. The different courses of the disease, in different seasons and different epidemics, seems to point to this conclusion. The soil as well as the seed must be considered in the etiology of croupous pneumonia. It is said that light-complexioned persons are more subject to pneumonia than dark-complexioned. A low state of health, a sluggish liver and kidneys, a constipated alimentary canal, a skin with clogged up pores, and superficial breathing, are all conducive to the development of pneumonia. In other words, pneumonia is likely to occur in the individual whose tissue metamorphosis is retarded.

Steam is hard to keep up in an engine whose fire box is full of ashes. So it is with the human body; health is hard to maintain with the bowels

full of dead and effete material, with the bronchial tubes full of waste matter that should have been excreted by the kidneys and the skin.

This, together with lazy and shallow breathing are the most frequent predisposing causes of pneumonia. The time-honored theory that cold was both a direct and a predisposing cause of pneumonia, has long since been successfully contradicted, and needs no refutation by the writer. If cold is a cause of pneumonia, either direct or indirect, why is it that there is more pneumonia in states with open winters than in countries where the temperature remains below freezing point all winter. Real healthy blood has a germicidal effect on bacteria, or at least a tendency to throw off the bacteria, or to eliminate it from the system. The pneumococcus enters the lung through the open mouth, probably with every breath we take. It travels with inhaled air through the trachea and bronchus, and into the air cells and is there lodged on the walls of the alveolar tissue. If conditions are favorable to health, the blood will not take up the poisons, but will either destroy it or throw it off. But if the system is already loaded down with dead and effete material, is already suffering from auto-infection, then what happens? It remains there, its favorable location causes it to grow and multiply. It has found the favorable soil for its growth, development and multiplication. The great nervous system, through its wonderful complex and reflex action, commands an army of red blood corpuscles to destroy the invading army of pneumococcus. And for the time being the small

alveoli in the human lung is the battle field. Thousands of red and white corpuscles are hurried to defend their country. The body is thrown into severe chill, followed by a rise in temperature 101 to 105. The pulse is accelerated to 100 to 140, full and bounding. Pain is severe and generally reflected to the nipple. The blood cells are rushed to the affected part in an effort of nature to preserve its integrity; many of them are crowded through the walls of the alveoli, mixed with fibrin, and later appear in the sputum; hence the brick dust or rusty sputum said to be pathognomonic of pneumonia. The alveoli or air cells gradually fill up with blood and fibrin, making solid lung of the part affected. No rales can be heard over the affected lung, percussion elicits a dull note. Owing to the reduction of lung fit for breathing, we have increased respiration. If one-quarter of the lung is involved, respiration is 30 to 36 per minute; if one-half of lung is involved, respiration is from 40 to 50 per minute. The pulse is increased to 100 to 160. This increase in pulse rate is differently accounted for by different writers.

The circulating carbon dioxide in the blood current from the non-aeriated blood that passes through the affected lung, the condition of the blood current, due to the infectious action of the pneumococcus, as well as a reflex action of the pneumogastric nerve, are, in my opinion, all causative factors in raising arterial tension or other untoward heart symptoms. The ashy complexion of our patients tells us that the blood is not properly aeriated or oxygenized. The patient has now been sick for seven.

or eight days, and the chemical laboratory of the human body begins to manufacture anti-toxine for pneumonia. As soon as there is enough anti-toxine in the blood, the plug in the alveoli softens, air returns to the crippled lung, the temperature and pulse both fall below normal, a heavy perspiration breaks out over the body. There is some resonance or percussion; we now hear the rale reduct, resolution has established itself, and now convalescence is established. This is the ordinary course of uncomplicated cases of croupous pneumonia, in otherwise healthy adults. But very often there is no such even course and no such eventful recoveries, but cases terminate fatally from the third to the twenty-first day. Cases presenting various and many complications may be put down as mixed infection upon one hand and a peculiar soil upon the other. Pleurisy is the most common complication of croupous pneumonia.

When the parietal or the visceral layer of the pleura is involved in the general inflammation the fluid or pus which may accumulate in the cavity on account of this complication may require removal.

The next most serious complication is heart affection. When we bring to mind the extra amount of work the heart has to perform during the attack, the amount of impure blood that is propelled through this organ, then can we imagine the danger and liability of endocarditis and myocarditis. The often sudden and unexpected deaths from pneumonia after the crisis, ascribed as heart failure, still furnish a profitable field for investigation.

Diagnosis.—The diagnosis of an ordinary uncomplicated case of croupous pneumonia in an adult should be an easy task. The sudden onset, severe chill, and pain under the nipple, followed by a bounding pulse and high temperature, are characteristic of pneumonia. The rusty sputum is said to be pathognomonic of pneumonia. In children we may have spasms. In the aged we may have a subnormal temperature and a depressed pulse. Under such condition the pain in the side or under the nipple may be mistaken for intercostal neuralgia. In such conditions we must depend upon physical examination in making a diagnosis. The crepitant and siblant rales, and later the consolidation and dullness over the affected part, should clear the diagnosis. To discover that your patient had pneumonia is almost unpardonable. The microscope may often be put to valuable use, especially is this the case where there is a question as to whether we have to deal with typhoid or pneumonic fever. I wish to say, however, that most of these cases are typhoid fever primarily and pneumonia secondarily.

Treatment.—In the treatment of croupous pneumonia I have nothing new to offer. Cases seen during the stage of ingorgement and before consolidation may, by prompt and vigorous therapeutics, be aborted. After consolidation of the affected lung no remedy known will abort a case of pneumonia. The principle of the treatment lies in elimination, antiseptics and tonics.

Elimination is best effected by calomel and saline cathartics; the mercury not only acts as an eliminant,

but as an antiseptic also. Aconite and veratrum are employed not only as antipyretics, but as eliminants. Digitalis serves the double action of tonic and diuretic.

Creosote or creasotal, guaiacol carbonate, only serve the single purpose of being suitable and valuable antiseptics. Expectorants are also to be considered as eliminants. The envelopment of the chest with a cotton jacket, after the chest has been oiled with glycerine, is an agent of value, and replaces the old-fashioned and time-honored corn meal or mush poultices. It is well for the physician to see these cases at least once in twenty-four hours. Although the writer has never bled a case of pneumonia, still will not hesitate to do so should an occasion exist; as a rule, however, the same results can be obtained by active cathartics that are to be obtained by bleeding, *i. e.*, reduction of the volume of blood. Fly blisters, in my opinion, are only of

value in pleuro-pneumonia. Where the parietal pleura is involved the fly blister used as a counter irritant is of much value, but is not needed and of very little value in uncomplicated cases. It is well to suspect a pleuritic effusion, and examine for the same frequently. Prolonged convalescence, frequent rigors, alternated by a rise of temperature and sweating, are indicative of pus absorption. Search for pus with an aspirator, and if found, evacuate, and give your patient a chance of recovery. Of course, this part of the treatment belongs to the practice of surgery. The physician should ever be on the alert to discover such cases, and, unless a surgeon himself, he should turn it over to a surgeon at an early date. The physician who successfully carries through a patient sick with double croupous-pneumonia is entitled to a remuneration equal to that of a surgeon, who has done, or performed, a capital operation.

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REYNOLDS COUNTY—T. W. Chilton, M. D., Corridon.
SALINE COUNTY—D. E. Bell, M. D., Marshall.
ST. CLAIR COUNTY—E. D. Miles, M. D., Osceola.
ST. LOUIS—T. A. Hopkins, M. D., St. Louis.
ST. LOUIS COUNTY—H. G. Wyer, M. D., Kirkwood.
SCHUYLER COUNTY—H. E. Gerwig, M. D., Downing.
SCOTLAND COUNTY—O. F. Pile, M. D., Memphis.
SHELBY COUNTY—L. W. Dallas, M. D., Hunnewell.
STODDARD COUNTY—O. F. Pile, Memphis.
SULLIVAN COUNTY—G. S. Milnes, M. D., Milan.

EDITORIAL.

RELATION OF MEDICINE TO SOCIAL AND BUSINESS INTERESTS.

The important relation of medicine to social and business interests of a state and nation are each day becoming more apparent to the medical profession in general and to the public at large. It is now generally recognized that the public health, com-

mercial prosperity and various social interests frequently suffer because of a lack of efficient legislative sanitary regulations and defective medical laws.

During the last few years, however, it is certainly gratifying to note that the medical profession and the public are becoming more interested in important matters of medical science

relating to the social welfare and business interests of state and nation. Through the work and influence of medical men during the last few years the masses of the people have been gradually enlightened through the medium of some of our best literary journals on important matters pertaining to the health of the people. So surprising and so startling have been some of the facts recently revealed to the public by reliable investigators along the line of food and drug adulterations that we have good reason to believe that we are on the eve of a general awakening of our people to the urgent necessity of proper legislative measures in behalf of the health of the public. Until very recently the eyes of the general masses of the people have been absolutely closed to numerous audacious frauds which have been perpetrated upon them during the recent years of the past. For instance, as an example, the food value consumed by the American people is said to be about \$5,000,000,000 (five billion dollars) annually. Out of this amount we are told that various foods to the extent of the value of \$100,000,000 (one hundred million dollars) is fraudulently prepared every year, and that 10 per cent. of these fraudulently prepared foods, which represents a value of \$10,000,000 (ten million dollars), contains poisonous substances and otherwise noxious agents which have a deleterious effect upon the health of the people who consume them. Those who have investigated this subject have reached the conclusion that the extent to which fraudulently prepared foodstuffs is now being carried on in this country is sufficiently great

to cause alarm on the part of the consuming public.

Some idea of the possible extent to which some of our common articles of food are adulterated may be obtained by a knowledge of the fact that there are now six firms in this country regularly engaged in the manufacture of coffee-bean-making machinery. Each firm, we are told, has scores of clients using these coffee-making machines, which grind out bogus coffee berries by the ton. These artificial, factory-made berries, it is said, are more perfectly formed than the true, natural berry, and we have no good reason to doubt that many of them may contain stimulating, narcotic ingredients, which have a deleterious effect upon the health of the uninformed people who use them. The substitution of red lead and rice flour for cayenne pepper; of charcoal, cracker dust and spent cloves for allspice, with numerous other citations of adulterated food articles are stated to us as facts by reliable authority. Of ninety-three samples of candy examined by the Massachusetts board of health, it was found that eighteen were colored with the poisonous chemical compound of chromate of lead.

One of the most widespread evils in our land is found, however, in the "patent-medicine curse." According to Dr. Hiss, of Chicago, the sale of patent medicines in the United States must reach the enormous sum of \$60,000,000 annually, and from the composition of many of these so-called remedies, as revealed to us by expert analytical chemists, we cannot fail to be convinced that a very large percentage of these preparations does

positive harm. The increased use of alcohol in the United States during the last few years, it is said, is not due to the increase of individual use, or to an increase of the number of individuals using it as such, but to the enormous consumption of patent medicines, many of which contain all the way from 12 per cent. to nearly 50 per cent. of this intoxicant. It is stated that one of our middle west cities turns out 21,000,000 barrels of patent medicine every year, and that another patent medicine firm uses 500 barrels of whisky per week in making its product. The harmful effects and the number of physical wrecks caused every year by the patent-medicine curse can never be told. When it is a fact known to medical men that many of the innocent, uninformed citizens of our state, deluded by false promises of a restoration to health by the bold and misleading advertisements of patent nostrums, are unknowingly taking preparations which contain morphine, opium, cocaine, alcohol and other dangerous drugs, it certainly, without any question, becomes the urgent duty of our state and nation to protect them.

To these impositions on the public add the deceiving advertisements of numerous other fake cures found in the columns of most all of our daily papers, the reckless sale of other harmful narcotics, the fraudulent testimonials and advertisements of illusionists and monomaniacs who pose before the public as healers of the sick, with the cunning dealings of the unscrupulous rascals who know they are practicing the gravest kind of deception when they extort money from our sick and trustful citizens by

promises of a cure through a divine power. A lack of space will not permit us to enumerate more of these serious and grave impositions, which are being daily practiced on our people, and which are constantly jeopardizing the health and lives of many of the good, honest, uninformed, health-seeking citizens of our state and nation.

In the face of these facts, which could be multiplied, has the time not come for an emancipation of our people from the ignorance, suffering and harmful results to which they are daily subjected by these nefarious practices? The seething current of the rapidly increasing commercial rivalry in the direction of food and drug adulterations, and in the numerous fake practices imposed upon our sick and suffering, must be checked by the strong arms of our state and nation for the welfare of humanity.

To this end, for the accomplishment of this purpose, with many other duties devolving upon us, complete organization of the medical profession is the first necessary step. The American Public Health Association, the Conference of State and Provincial Boards of North America, the Public Health and Marine Hospital Service, with representatives of the health boards of the various states, the Section of Hygiene and Sanitary Science of the American Medical Association, our state boards of health, with various other organizations for the good of the public, must have the assistance and co-operation of the medical profession if the purposes for which they are intended are fully accomplished.

If a simple statement of these few

facts will be the means of appealing to the best judgment and wisdom of the medical men of Missouri in a way that will call forth renewed energy and still greater efforts in this work of organization, their purpose will be fulfilled. It is to be hoped that at our next annual meeting in May we will have enlisted in our ranks a force of at least 2000 loyal physicians of our state who will pledge their support in efforts to secure better medical and sanitary laws. M. P. O.

BENEFITS OF ORGANIZATION.

The influence which the organized profession, imperfect as this organization is as yet, is exerting in regard to medical legislation is very apparent. The very fact that we are organized makes legislators and executive officers give us some thought. Both the executive and the legislative branches of the state government are inclined to give a very willing ear to medical men, and we are reliably informed that some of the recent appointments upon the boards of managers were given to medical men in order that an opportunity would be afforded them to have a voice in the scientific as well as in the ordinary administrative work of the institutions. The better we are organized the more we can accomplish.

Dr. L. F. Murray has been appointed a member of the board of managers of the Nevada insane asylum.

RETROCECAL AND RETROPERITONEAL APPENDICITIS.

It may be stated, that when we speak of appendicitis in any form, we mean a pathological condition and

we are not dealing with a normal appendix.

The question as to whether we have in normal anatomy a retroperitoneal appendix is not under discussion. That such a condition, however, does exist I do not question, though it is conceded to be rare. But the question is, can we use as synonymous terms, retrocecal and retroperitoneal appendicitis? From a purely practical standpoint the answer is, yes.

It must be admitted that we seldom see the patient in the primary attack and that the vast majority of cases are operated on during or following a second, third or fourth attack. Following these various attacks are pathological changes and adhesions in nature's efforts to protect the general peritoneal cavity. As a result, new relations are established—a transposition of normal location takes place, and the appendix is forced back, away from the peritoneal cavity and back of the cecum, and a new formation of peritoneum, the result of inflammation, is formed over the appendix. In this way, it is virtually retrocecal and retroperitoneal.

The proximity to the gall bladder, the psoas muscle, the right kidney sub-space, the right ureter, the possibility of a sub-renal abscess independent of the appendix, all make the diagnosis difficult and perplexing. The chances are, however, that the vast majority of pus formations in the direction of the right loin and subphrenic region are due to appendicitis.

This must be due, not only to the location of the appendix back behind the cecum, but largely dependent upon the length of the appendix or

the point of rupture or ulceration of the organ. If the distal end of the appendix, which is fastened back of the cecum, is the seat of such necrotic changes, it will most likely form an extra peritoneal abscess. On the other hand, if the ulceration takes place near the proximal end of the appendix, septic matter may be poured out into the general peritoneal cavity and a localized or general peritonitis will ensue. In the latter case, as in the first, the appendix will be found securely anchored back of the cecum, and invested with a peritoneal covering—possibly a new formation—but to all intents and purposes it is not only retrocecal but retroperitoneal.

I can recall at least one case in which I operated early (eighteen hours after the beginning of the *primary* attack), in which I am confident that I had to deal with an *anatomical* retroperitoneal appendix. The peritoneal membrane covering its anterior surface was continuous with that covering the cecum—no adhesions had formed in the short time since the onset of the attack and no meso could be discovered. The appendix was firmly attached to the cecum without intervening peritoneum and it required delicate dissection to free it from the cecum. The ulceration had taken place one and one-half inches from the proximal end of the appendix and purulent material was poured out into the general cavity.

It is often difficult to determine just when to operate in a case of retrocecal appendicitis. Certainly unless called early and the pain or pressure is referred to the loin, with slight resistance over the normal location of the appendix and reson-

ance is prominent over the region, with increased dullness toward the subphrenic area, it is better to wait until there is a well-defined tumor and open in the loin, rather than do the classical McBurney operation in front and run the great risk of infecting the general peritoneum. However, if the case is seen early, the anterior operation is to be preferred, with a chance of removing the appendix before rupture has occurred.

The advantage of removing the appendix cannot be over estimated, and I am sure I express the feeling of the great majority of operators when I say that we never feel quite satisfied with our operative work unless the appendix is removed. This is not always possible, if we consider the welfare of the patient. C. L. H.

THE DOWNFALL OF THERAPEUTICS.

Before the development of the natural sciences placed medicine as an art among the applied sciences, therapeutics was the most important branch of medical study and practice. Among the medical sects the same observation holds true at the present time. During the last half century medical progress, however, the pursuit of exact medical knowledge, has led students chiefly into surgery, diagnosis, pathology and bacteriology. Definite knowledge of the intimate reactions of the metabolic processes of our bodies with foreign agents introduced as drugs is just coming into sight with the growth of the new science of pharmacology, and so, necessarily, therapeutics at present lags behind. All of which is new to no one who sees, and is introduced sim-

ply to draw attention to an unfortunate practical result of this state of affairs. For some years progress in materia medica and therapeutics has seemed almost to lie in the hands of lay manufacturers. With their new compounds, and their disguised old ones, the drug makers have kept the materia medica expanding at an alarming rate. This condition is by no means wholly to be deplored, as the pharmacentists have contributed much to the comfort of physician and patient. However, the tremendous preponderance of commercialism in recent therapeutic progress has brought with it some ill conditions. Money-making attracts the unscrupulous, and the medical profession has difficulty in separating the wheat from the tares. Any good, new laboratory product of therapeutic value is immediately imitated or attacked. There develops intense feeling between foreign and domestic manufacturers, and all the while the poor doctor, as the bone of contention, is overwhelmed with "literature" and "medical journals" (*sic.*) and agents. Contradictions multiply until mercury and quinine appear to be about the only agents of whose qualities the physician may feel reasonably sure! The prize—the patronage of the profession—being of great commercial value, many subterfuges are employed by some to enable them to share in it. Official positions in medical bodies at times are sought, and at other times are appropriated by not too nice strategy. Medical journals are subsidized and new ones are published. A number of makers pay a regular stipend secretly to complaisant doctors here and there over the country, who, in return, are ex-

pected to read "useful" papers and at every possible turn to uphold the wares of the benefactor. Thus it comes that therapeutics has reached its present low state. Scientific physicians give their time to diagnosis and pathology, and limit themselves to simplest measures of treatment. Others make a diagnosis and then choose the remedy that the maker says is best for that condition. Many among us who love the study of means to alleviate suffering have endeavored faithfully to recreate professional interest in pure therapeutics, but the combat with entrenched wealth and monopoly is an unequal one in the face of general professional lethargy. But hope is not to be abandoned.—*Editorial American Medicine.*

THE FORWARD MARCH.

Before going to press we received from Dr. J. J. Norwine, councillor of the tenth district, roster of members, check in payment of dues and application for charter from the Dunklin County Medical Society and Pemiscot County Medical Society; also from Dr. F. B. Hiller, councillor of the first district, roster of members, check in payment of dues and application for charter for the Adair County Medical Society. The result of the activity on the part of members of the judicial council speaks for itself. Our constantly increasing membership gives promise of complete organization throughout the state at a time not far distant. The following is a list of new members received:

Quinn, Ed., Brashear.
 Martin, J. W., Kirksville.
 Grim, E. A., "
 Grim, E. C., "

Trumbower, M. R., Monett.
 Kelley, N. F., Kennett.
 Finney, W. B., Kennett.
 Johnson, G. L., Kennett.
 Rigdon, Thomas J., Kennett.
 Bauldwing, Paul, ———.
 Bond, Van H., Cotton Plant.
 Egbert, Thomas H., Kennett.
 Mobley, A. B., Kennett.
 Cowell, J. F., ———.

Crowe, B. D., Caruthersville.
 Huggens, M. H., “
 Luten, J. G., “
 Phitts, G. W., “
 Byars, H. F., “
 Conrad, A. R., “
 Hendricks, M. B., “
 Martin, Chas., “
 Tipton, Paul, Cooter.

NEWS ITEMS.

Panama Health Conditions.—In a cablegram to the war department Gov. Davis, of Panama, gives the following summary of Isthmus conditions: In the families of the Americans employed on the Isthmus only three cases of yellow fever have occurred, and one death. Of the employes hired on the isthmus, five have had yellow fever and one has died. Among the Americans not employed on the Isthmus, including those of the cruiser Boston, there have been nine cases of yellow fever and five deaths. The total number of cases originating on the Isthmus is thirty-two, of which nine have proved fatal. Six cases are now convalescing. Since the American occupation, the dispatch says, two cases of smallpox have been reported, but none has originated there. There is no typhoid or plague. Of the 4,000 employes, only 3 per cent. are ill of any disease. Governor Davis says that the sanitation of Panama is progressing as efficiently as in any city of the United States. — *Journal American Medical Association.*

The Ultra-Modern Physician.—Dr. Vidal, an old country doctor, was

treating a child aged ten years, suffering with an ordinary bilious attack. The over-anxious parents, who seem to have dabbled in “Be Your Own Physician” books, imagined that they discovered symptoms of tuberculous meningitis. Behind the back of Dr. Vidal, who was the family physician, they called in a young physician who was ultra-scientific. He examined the little patient and left his opinion on a card for the instruction of the behind-the-times Dr. Vidal. The erudite opinion read as follows: “Kernig positive; slight embryocardia, especially in azoulay’s position; cryoscopy and kochibacilloscopy of Quinke’s fluid would supply basis for judgment. If negative, Eberth or Talamon-Fraenkel might be thought of. In the former of these two hypotheses, I could bring, on receiving intimation from you, some chantemesse serum; in the second, I could bring a specialist to do Quinke’s puncture.” To this cryptic message Dr. Vidal sent the following reply: “Veni, vidi, vici. Veni: Neither on bike, nor auto, nor motor, nor in a boat, but in a phaton. Vidi: Neither myosis, nor mydriasis, nor vasomotor red line, nor Wunderlich-simple syno-

cha. Vici: Naturam sequere. Expectant treatment. The patient goes on under his blankets (without stirring a step), in the words of Sophocles, whom, in spite of his antiquity, I love, towards restitutio ad integrum. Archfraternal thanks to the Quinke specialist." What the young ultra-scientific physician answered Dr. Vidal does not tell us.—*Merck's Archives*.

Anemia in Porto Rico.—The report of the commission appointed by the governor of Porto Rico to investigate the disease known in that island as "anemia," forms a most instructive monograph on uncinariasis. For the commission proved beyond the shadow of a doubt, unless to the minds of certain of the perverse native physicians, that the anemia of Porto Ricans is, in an overwhelming majority of cases, due to hookworm infection.

The economic importance of the disease is shown by the statement that more than 90 per cent. of the rural population of the island is affected. The commission was composed of Drs. Ashford and King, whose previous work upon the subject aroused the interest of the islanders and finally led to the appointment of the commission, and Dr. Gutierrez, health officer of Bayamon. In a little more than five months they treated 5,490 cases of hookworm disease. Of these 2,244 were cured (hemoglobin above 85 per cent.), 377 practically cured (hemoglobin between 70 per cent. and 85 per cent.) and 1,727 improved. In consideration of the fact that many of these patients had been unsuccessfully treated for years with quinine, iron and other tonics, the

true cause of the anemia being unsuspected, no better instance of the great boon of modern medicine to the tropics is required. Regarding the mode of infection in uncinariasis, the members of the commission are very positive that, in Porto Rico at least, the disease is generally contracted through penetration of the skin by larvae of the parasite. Negroes, and possibly Malays and Mongolians, are relatively immune to the disease, even when harboring the parasites; this is a strong argument in favor of the view that the symptom-complex, including the anemia itself, is due rather to a toxin, or toxins, of the parasite than to actual abstraction of blood. The severity of the affection in Porto Rico may be judged from the estimate that it is responsible for 30 per cent. of all the deaths in the island. In the treatment of the recorded cases, thymol was almost exclusively employed. After reading Bentley's results with beta-naphthol, that drug was tried in a few cases with satisfactory expulsion of the parasites.—*American Med.*

Dan McKenzie in *The British Journal of Children's Diseases*, reports a case of appendicitis in a boy of four years. The little fellow was subject to acute gastric attacks, so nothing unusual was anticipated. On the day of the examination he complained of "stomachache" and pain on micturition; the abdomen was found hard and tender, and rectal examination revealed a full fluctuating bladder. Cystic trouble being then suspected, the patient was catheterized under anesthesia, but nothing was found to account for the symptoms. Bimanual

palpitation of the pelvis and abdomen now revealed an oval-rounded tumor about the size of a pigeon's egg in the right iliac region. Appendicitis was diagnosed and operation revealed an appendix perforated in several places, lying in a pool of pus. A child's pelvis is so shallow that a finger in the rectum can palpate the abdomen far more effectually than in later life, and the author emphasized his contention that rectal examination should be undertaken as a matter of routine in all doubtful cases of illness in children where the symptoms point to the abdomen as the seat of disturbance.

The Nathan Lewis Hatfield Prize for Original Research in Medicine.—Five hundred dollars will be awarded by the College of Physicians of Philadelphia, to the author of the best essay submitted in competition on or before March 1, 1906; subject, "The Clinical and Pathological Diagnosis of Sarcoma." Essays must be typewritten, designated by a motto or device, and accompanied by a sealed envelope bearing the same motto or device, and containing the name and address of the author. They must embody original observations and researches. The committee reserves the right to make no award if none of the essays submitted is considered worthy of the prize. Further information may be obtained by addressing Dr. Francis R. Packard, College of Physicians, 219 South Thirteenth street, Philadelphia, Pa.—*Medical Record*.

The Prevention of Smallpox.—Dr. Benjamin Lee, secretary of the Pennsylvania State Board of Health, points out in his annual report, just sub-

mitted, that during the year ended November 1, there were reported in the state 5,172 cases of smallpox, with 521 deaths, which is in marked contrast with the experience of the German army, in which since vaccination and revaccination were made compulsory, thirty years ago, there has not been a single death from smallpox. In the city of Philadelphia, as a result of an active vaccination crusade, the number of cases of smallpox has been reduced from 396 in December, 1903, to 26 in June, 1904, and in Pittsburg from 537 cases in October, 1903, to 15 in March, 1904. At the present time there are only 42 cases throughout the entire state.—*Atlanta Journal-Record of Med.*

Selling Intoxicating Liquors (Nostrums) without a License.—There is one method which has not been resorted to for limiting the debaucheries of the nostrum traffic, and the Women's Christian Temperance Union and other temperance people might well see what can be done by it to abate the evil. It is suggested by a recent occurrence in Illinois. A Greenville merchant was fined \$20 for selling Peruna, containing about 25 per cent. of alcohol without a license. It is well known that the nostrum vendors are in fact rivalling the saloon-keepers, and the help of these should also be secured to drive out of competition the depraved drug, grocery, and departmental stores which are threatening the business of those who properly pay a license for carrying on the liquor traffic. The harm done and the expense incurred by the community through the rum sellers should at least be partly offset by the license

fees paid to the public treasury. But the patent medicine sellers evade the law by calling their vile alcoholic mixtures medicines. In this nefarious business the United States Government, with its copyrights and trademarks, protects the nostrum syndicates and drug saloons, and Congress still fails to pass the Pure Food Bill! In such contradictions and immoralities does our system of legislation land us.—*American Medicine*.

The Different Systems of Medical Practice.—Christian science is suggestion, plus absurdity; divine healing, suggestion, plus faith in God; Dowieism, suggestion, plus prayer and holy horror; Wiltmerism, suggestion, plus imagination, pure; magnetic healing, suggestion, plus imagination also; osteopathy, suggestion, plus massage; homeopathy, suggestion, plus nothing; allapathy, suggestion, plus tubs full of drugs, that either kill or cure; regular or rational medicine, suggestion, plus the best common horse sense available, or suggestion and medicine mixed with the best quality of brains obtainable.—*Atlanta Journal-Record of Med.*

Preventive Medicine in the Field.—The military authorities of Japan have permitted but little information to reach the outside world concerning the details of the operations of their armies but such scant news as has been made public shows that she has gone further in the application of preventive medicine in the field than has any other power in the history of the world. We learn that sanitary authorities who accompanied or pre-

ceded the first line of advance examined the waters of the various wells, creeks, and rivers, and labeled such waters as "potable," "non-potable," or "potable only after boiling" for the information of the troops who were to follow. This, coupled with a similar foresight in other directions, has reduced the sick list to a degree which seems almost incredible to those who are familiar with the history of our civil war and the Cuban campaign. We wonder if our own government will profit by this example? We hope for better things than our past experience would lead us to look for.—*New York Med. Journal*.

Dr. Ernest W. Lewis reports the case of a Hindu woman who complained about a painful swelling in the lower part of the abdomen. She gave a history, which afterwards proved false, of a fall several weeks previously. The patient was very weak and had a temperature of 103-2°. A pelvic abscess was found in which some hard substance could be felt. On opening the abscess a piece of stick six inches long was removed, together with a quantity of foul pus. The true history was then revealed, namely, that the stick had been introduced four months previously to procure abortion, and she was successful. The patient made an uninterrupted recovery. This seems to be a common method of procuring abortion in India.

Dr. N. News Wood, Chicago, Ill., of Christian Hospital notoriety, was sentenced to ten days in jail for contempt of court, December 30th, and in addition he was fined \$100 and the

"hospital" \$250, for violation of an injunction restraining them from using the name of Dr. John B. Murphy in connection with the establishment.

Dr. Anita Newcomb McGee has been made a member of the United Spanish War Veterans, and is the only woman holding membership in that organization. Dr. McGee during the war with Spain was commissioned acting assistant surgeon.

Two bills concerning lepers are now under consideration by the House Committee on Interstate and Foreign Commerce. One bill provides for the establishment of a sanitarium for the care of the 275 persons who are said to be lepers in this country, the institution to be located in the arid region of the Northwest. The other bill is one appropriating \$150,000 for the scientific study of the disease in Hawaii.

The first report of the State Hospital for Tuberculosis, at Raybrook, in the Adirondacks, was presented to the New York State Medical Society by the superintendent, Dr. John H. Prior. Of the eighty-two patients admitted, eleven have been discharged as cured. Of the remainder five have not been in the hospital long enough to justify any conclusions, nineteen have apparently recovered; the disease of thirty-four has been arrested, and all the rest show improvement. "The law creating this institution, and under which it has been in operation for a period of six months," says Superintendent Prior, "seems to be eminently satisfactory. It contains many new features which have never before

been tested. The requirements for admission and the methods designed to limit treatment to incipient cases only, will be adopted and tried by several other states in the near future. Thus far it seems unnecessary to advise any changes in the organic law."

Prof. Puschmann has given 500,000 marks to the University of Leipzig to further the study of the history of Medicine.

An original system of educating the blind is in operation in Chicago. In three of the public schools in different parts of the city blind children are received along with the healthy ones. They are first taught the alphabet and a system of reading by a special teacher and then assigned to their proper classes, where they take part in all the ordinary school exercises, have the same books, lessons, maps, etc. Their books are printed in the six dot system, but contain the same material as those of the seeing students. In this way they are kept in touch with the world, where they must live, and not segregated in an artificial life with unfortunates of their own kind.—*Journal Michigan State Medical Society.*

It is reported that the Venezuelan government has adopted regulations whereby all medicines not duly authorized and approved by the board of physicians shall be excluded from the republic. Large quantities of patent medicines have been annually exported from the United States and from other countries to Venezuela, and need of some action to protect the people has been imperative.

COUNTY SOCIETY NOTES.

ST. LOUIS COUNTY MEDICAL SOCIETY.

Dr. H. G. Wyer, President.
Dr. H. T. Randle, Secretary.

The last regular meeting of the St. Louis County Medical Society was held on February 8th at the residence of Dr. H. T. Randle, Clayton. The meeting was called to order at 2:30 P. M. by Dr. H. G. Wyer with eleven members present. The minutes of the December meeting were read and approved, there being no meeting in January. The names of the committees appointed by the president for the ensuing year were read as follows:

Executive Committee.—R. D. Moore, Webster; R. D. Moore, Central; John Pitman, Kirkwood.

Elections and Ethics.—C. L. Armstrong, chairman, Webster; J. D. Pfister, Fern Ridge; N. N. Jensen, Florissant.

Library and Publication.—R. M. Higgins, chairman, Webster; J. C. Gallagher, Valley Park; F. E. Guibor, Maplewood.

The committee on arrangement for a place to hold meetings made their report and were discharged, and a new committee appointed, consisting of Drs. Randle, Kock and Moore. The names of Drs. J. M. Berry and W. R. Hanpeter, with applications for membership, were filed and referred to the committee on election. Under extraordinary business, Drs. Moore and Carter, members of executive committee, spoke emphatically on the subject of papers for meetings, and urged that members do more

writing and put themselves before the society. Dr. Carter suggested more seasonable papers, and stated in his closing remarks, that with "no papers, no society; no society, no scientific men." The communication from the State Board of Health concerning state sanatoria for consumptives was read and approved. Dr. Howard Carter moved that the secretary be instructed to address a communication to the representative of the district in the state legislature and express the sentiments of the society for such a bill. A very excellent and creditable paper on "Scientific Medicine" was read by Dr. H. G. Wyer, of Kirkwood. Dr. John Pitman, who was to read a paper on "Surgery of Carrbru," failed to be present. After a vote of thanks to the hostess and host, the society adjourned.

H. T. RANDLE, Secretary.

JACKSON COUNTY MEDICAL SOCIETY.

Dr. R. T. Sloan, President.
Dr. Max Goldman, Secretary.

On January 26, 1905, at a regular meeting of the Jackson County Medical Society, Dr. Scott P. Child read a paper on the timely subject of "Diphtheria; with Special Reference to Prevalence and Prophylaxis." This essay was an excellent production, treating especially with the methods intended to lower the death rate from this disease and including a commendable review of the statistics and literature upon this subject. In a paper entitled "The Pathology of

Diphtheria," Dr. Frank J. Hall expressed the view that the disease is a general one with a localized focus of infection; also, that the toxine of diphtheria is of a multiple nature, and mixed infections are merely incidental; he also touched briefly upon the pathologic processes occurring within the heart and the cells of the nervous system. Dr. I. J. Wolf opened the discussion of these papers with a few remarks, stating that the present comparatively high mortality is due to first, wrong diagnoses; secondly, late diagnoses; and, thirdly, the administration of too little serum in the early stages. He said the bacteriologic diagnosis was of greatest importance, the clinical of secondary importance. He also laid stress upon the extreme care to be exercised in order to properly procure the specimen from the throat for culture or examinations. Dr. F. J. Hall exhibited a microscopic section of a diphtheritic membrane, with groups of Klebs-Loeffler bacilli therein.

At a regular meeting of the Jackson County Medical Society held on February 9, 1905, two papers of unusual interest were read. The essayists were Dr. O. H. Leonard, whose paper was on the subject of "Hydatiform Degeneration of the Chorionic Villi," and Dr. S. G. Burnett, whose subject was "Mental Inhibition on the Relation of the Neuroses and Premelancholias to the Divorce Court." There was a large attendance and many took part in the discussions elicited by the papers.

Dr. Leonard's paper was a thorough and up-to-date review of this disease of the chorion, and included an interesting account of a recent case

demonstrating especially the malignancy of the disease; he concluded by recommending early conservative treatment, keeping in mind the malignant tendency and the liability of general and fatal metastasis.

The discussion was opened by Dr. J. F. Binnie, who spoke briefly upon the surgical treatment: he said that could a serum be isolated which would destroy the precise cause of the disease, viz., the proliferation of syncytial cells, the ideal treatment would be the introduction into the blood of such a serum; at present, however, the proper treatment seems to be the early removal of the uterus and appendages as soon as the diagnosis of the malignant form of the disease is made, the operation in these cases is usually more dangerous than in those ordinarily operated on.

Specimens of vesicular mole, as the above disease is sometimes called, were presented by Drs. F. J. Hall and A. H. Wall, who made some remarks on the cases from which they procured the specimens. Dr. Hall mentioned the theory of "cystic action of ferments" as related not only to the normal development of the chorion, but also to the malignant degeneration of the chorion; anti-bodies, or toxins, he said are produced in both instances in varying amounts; when sufficient anti-bodies are produced in the case of the pregnant uterus, it marks the beginning of labor; if too many are produced, especially early in pregnancy, abortion is likely to occur; in the case of syncytioma maligna not enough anti-bodies are produced. He remarked, also, that this form of chorionic disease is in a class by itself; "morning sickness," a

common symptom of some value, is the result of the action of the toxins or "cytic" bodies on brain centers; microscopic section shows evidence of malignant degeneration with the syncytial cells as causative agents; in some cases we have both villi and syncytial tissue; in others the villi have been lost and we have only the syncytium. He concluded by saying that this disease of the chorion is a syncytioma maligna and the treatment consists in early removal of the uterus.

Dr. S. G. Burnett then read his paper entitled "Mental Inhibition," in which he related numerous conditions and states of the mind which frequently cause disruption of most intimate family ties and often lead on to divorce proceedings in the courts; and which mental states are simply the manifestations of a pre-melancholia or other neurosis which can be benefited by judicious treatment. At this meeting a number of applications for membership were received.

MAX GOLDMAN, Secretary.

HOWELL COUNTY MEDICAL SOCIETY.

Dr. J. W. Bingham, President.

Dr. H. C. Shuttee, Secretary.

The Howell County Medical Society held its regular meeting February 2d, Dr. J. W. Bingham in the chair. On account of the extreme cold weather the attendance was not as large as usual. Dr. J. F. Reiley read a paper on "Gonorrhœa in Women," which was well received and generally discussed. Resolutions were adopted requesting our representative and senator to support the bills creating a new

state board of health and establishing a home for incipient tuberculosis cases. Dr. A. H. Thornburgh, West Plains, joined the society and paid dues for the State Association. The society adjourned to meet April 6th.

H. C. SHUTTEE, Reporter.

BOONE COUNTY MEDICAL SOCIETY.

Dr. J. E. Thornton, President.

Dr. W. A. Norris, Secretary.

The Boone County Medical Society met February 11th, in regular monthly session, at Parker Memorial Hospital, with Dr. J. E. Thornton in the chair. Dr. Max Myer read a paper on "Consideration of the Different Methods of Forcible Dilatation of the Cervix." The paper was discussed by other members of the society. Dr. A. E. McAlester presented a clinic—fracture of the internal condyle of the femur. The society then adjourned to meet the first Monday in March.

W. A. NORRIS, Secretary.

ATCHISON COUNTY MEDICAL SOCIETY.

Dr. L. J. Martin, President.

Dr. A. McMichael, Secretary.

The Atchison County Medical Society held its regular meeting in Tarkio, January 17th. Dr. E. E. Richards called the meeting to order for the purpose of holding the annual election and arranging for an interesting program for the next meeting. The election resulted as follows: President, L. J. Martin; vice-president, G. W. Lott; secretary, A. McMichael; treasurer, S. D. Smith; censors, L. J. Martin and A. McMichael; reporter, J. A. Postelwaite.

And now the readers of the JOURNAL MISSOURI STATE MEDICAL ASSOCIATION may have the pleasure of reports from Atchison County Society written by one who wields the pen of a literary master; and, too, we are promised papers which may add great value to the reports from this county. Some of the papers read before each meeting will be sent to the JOURNAL to abstract and incorporate in our reports. The society adjourned to meet in Rockport, Tuesday, April 11th, at which time we are promised a good attendance and some of the most excellent papers ever read before the society.

AUSTIN MCMICHAEL, Secretary.

ST. LOUIS MEDICAL SOCIETY.

Dr. F. L. Henderson, President.

Dr. T. A. Hopkins, Secretary.

REPORT OF THE ST. LOUIS MEDICAL SOCIETY,

January 1 to February 11, 1905.

The first meeting of the year was held January 7th. The officers elected for the ensuing year were in control, Dr. F. L. Henderson, presiding.

Dr. Henderson delivered an inaugural address, which was remarkable, in that it was a sincere heart-to-heart talk with the members of the society on matters relating to the advancement of the society, as a power in social, financial, political and scientific circles. The address was enthusiastically received, and many members openly expressed their admiration of the manner in which the subjects, bearing on the direct welfare of the society, were handled.

Dr. Henderson announced the names of members of the various committees

to assist in the work of the ensuing year, as follows:

Committee on Election.—Dr. L. E. Newman, Dr. Amand Ravold, Dr. L. T. Pim.

Committee on Publication and Debate.—Dr. Robert Barclay, Dr. W. H. Stauffer, Dr. W. B. Shields.

Executive Committee.—Dr. Joseph Grindon, Dr. G. C. Crandall, Dr. W. W. Graves.

Library Committee.—Dr. N. B. Carson, Dr. F. J. Lutz, Dr. W. B. Dorsett.

Committee on Pathology and Microscopy.—Dr. Hugo Summa, Dr. W. Bartlett, Dr. M. D. Jennings, Dr. E. F. Tiedemann, Dr. L. Harriss.

Committee on Public Health and Legislation.—Dr. John Young Brown, Dr. George Homan, Dr. H. J. Scherek.

A committee consisting of Drs. A. R. Kiefer, L. S. Luton and V. P. Blair was appointed to consult the trustees of the Medical Library Association, for the purpose of securing a permanent meeting place for the society.

The following papers have been presented for the consideration of the society:

Dr. T. C. Witherspoon presented a paper on "Developmental Displacement of the Abdominal Viscera with Demonstrations." The paper was interestingly discussed by several members.

Dr. John Young Brown presented a paper and four recent cases of "Intestinal Resection for Perforating Gunshot Wounds of the Abdomen," occurring in practice with Drs. W. Doyle and W. C. G. Kirschner at the City Hospital. The resections were seven feet, six feet, two feet and eighteen inches. Dr. Brown empha-

sized the necessity of immediate operation and thorough exploration of all cases presenting perforation, or any likelihood of such, and cited numerous cases to justify his remarks. The paper was discussed by many of the members, especially by those interested in surgical work.

Dr. H. J. Scherck presented an x-ray picture of an anomalous condition existing in the thumbs of a patient recently under his observation. An extra joint was plainly shown in each thumb. No irregularities in outline were noted and the owner was in no way inconvenienced.

Dr. R. M. Funkhouser presented a paper on "Phlebitis Following Abdominal Operations." He stated that the cause of such a phlebitis is usually obscure, and from a summary of four cases, observes that the condition usually occurs in the left leg. His last case was complicated by a neuritis, which extended the duration of the disease to nearly two years. The paper was discussed by Drs. Morris, Jonas, Kiefer and Moore.

Dr. N. B. Carson presented a "Specimen of Carcinoma of the Stomach," and read a history of the case. His observations led him to believe that no one symptom is absolutely pathognomonic of cancer of the stomach, that the complete history of the case and all symptoms must be considered to give a correct diagnostic opinion. He believes that after a thorough clinical and laboratory diagnosis has been made, at least an exploratory operation should be made, regardless of the presence or absence of a tumor mass. If a tumor is found, a free incision into the stomach should be made, with a view of obtaining all

possible information as to the nature, extent and necessary measures to be taken in removal of the neoplasm.

He stated that the danger of an exploratory operation at the present day of advanced technique, and aseptic surgery was practically nil, and this opinion was indorsed by those who discussed the paper.

Dr. W. E. Fischel opened the discussion and stated that in his opinion no one symptom was pathognomonic and that a careful consideration of all data, history, clinical and laboratory must be made in order that a clear diagnosis, prognosis and course of treatment may be made for the patient. The subject was also discussed by Drs. Myer, Brown, Snodgrass and Shattinger. Dr. Snodgrass presented some interesting statistical information in regards to laboratory findings in examination of stomach contents for carcinoma, showing that hydrochloric acid is rarely entirely absent and that lactic acid is usually present only in small amounts.

At the meeting of February 4th the death of Dr. Wm. Johnson was announced to the society. Dr. Henderson appointed eight members as honorary pall-bearers, and a committee consisting of Drs. Wm. McPheeters, F. J. Lutz and R. M. Funkhouser to draft resolutions in memory of Dr. Johnson. Dr. Funkhouser read the memorial of Dr. Johnson and it was indorsed by the society, and a copy of same ordered presented to Mrs. Johnson. Dr. Johnson was one of the oldest and most constant members and was an indefatigable worker for the best interests of the society.

New members have been elected to membership of the society, as fol-

lows: Dr. E. H. Henckler, Dr. W. A. Wilson, Dr. F. W. Patton, Dr. S. T. Vandover, Dr. F. P. Mawn, Dr. W. H. Mook, Dr. C. C. Drace, Dr. E. J. Viedt, Dr. D. B. Garstang, Dr. E. P. North, Dr. Chas. N. Guhman, Dr. A. C. Kimball, Dr. R. F. Amyx.

At the meeting of January 21st a reporter to the *State Medical Journal* was considered; on motion of Dr. Nicholson, Dr. Cleveland H. Shutt was elected to the position.

The treasurer's report shows that the society never was in a better financial condition, and that we have only eight delinquent members. A good showing for Dr. R. M. King, the treasurer, and for the enterprise and active interest which the members manifest.

C. H. SHUTT, Reporter.

HENRY COUNTY MEDICAL SOCIETY.

Dr. J. H. Britts, President.

Dr. F. M. Douglas, Secretary.

The Henry County Medical Society met in regular session February 8th, Dr. John H. Britts presiding. The minutes of the previous meeting were approved as read. The society then took up the subject of medical legislation. The bill before the present legislature, which has been so widely discussed by medical societies all over the state, was very liberally considered. Some features of the bill were favorably received, others met with adverse criticism. The secretary reviewed medical legislation in Missouri at some length, pointing out certain features in notable bills which had passed the legislature of 1877 making it a misdemeanor to practice medicine or surgery in the state of Mis-

souri without filing with the county clerk a diploma conferring the degree doctor of medicine, said diploma granted by a college of medicine duly established by law. A fine was provided of not less than one hundred dollars or more than five hundred dollars. The law made it the duty of the prosecuting attorney to take cognizance of violations of its provisions and bring the matter before the grand jury. The law of 1883 created the state board of health, with power to issue certificate to practice either on presentation of diploma or satisfactorily passing examination, all who had practiced for five years previous to the passage of the bill being exempt from its provisions, except that they were required to appear before the board to be granted certificate to practice. Certificates were to be filed with county clerks. Failure to comply with the provisions of this law is made a misdemeanor, punishable by a fine of not less than fifty nor more than five hundred dollars. Provision was made by this act for vendors of drugs or appliances for the treatment of the sick, who were licensed for a fee of one hundred dollars a month. No special provision was made for the enforcement of this law. The law of 1901 made it unlawful for any person not a registered physician holding a license from the state board of health, and that license recorded with the county clerk, to practice medicine and surgery in any of its departments or to profess to cure or treat the sick or those afflicted with bodily or mental infirmities in any manner or by any appliances. A fine of not more than five hundred dollars or imprisonment for not more than six months, or both,

is provided for violation of this act. The state board of health is given the right to refuse to grant a certificate or license or to revoke the same for unprofessional or dishonorable conduct. This law repealed the itinerant vendor's act, but made no provision for enforcement.

Dr. Britts tendered his resignation as president of the society because of his many other duties taking up most of his time, and asked the society as a favor to elect Dr. Shankland to fill the unexpired term. On motion of Dr. Gibbins the resignation was accepted, and Dr. Shankland was elected.

F. M. DOUGLAS, Reporter.

JASPER COUNTY MEDICAL SOCIETY.

Dr. A. B. Freeman, President.

Dr. J. T. Stamey, Secretary.

The Jasper County Medical Society held its regular meeting in the parlors of the Y. M. C. A., with President Dr. Robt. L. Neff in the chair. This being the last meeting in the old year, the society proceeded to the election of officers, which resulted as follows: President, A. B. Freeman; vice-president, J. D. Pifer; secretary, J. T. Stamey; treasurer, G. W. Miller. Dr. L. I. Matthews, censor for three years, to take the place of Dr. Blackwell, whose time had expired; this leaves the board of censors as follows: Dr. Ketchem for one year, Dr. Kincheloe for two years, and Dr. Matthews for three years. Dr. C. C. Cummings was re-elected reporter for the new year. Dr. Neff, the retiring president, read an able and scholarly essay on the progress made in medicine and surgery during the last year.

Dr. Lanyon announced that the "smoker" which the committee had planned was ready at 613 Main street. There being no further business the society adjourned, after which they repaired to the banquet hall.

C. C. CUMMINGS, Reporter.

CHARITON COUNTY MEDICAL SOCIETY.

Dr. M. B. Austin, President.

Dr. C. A. Jennings, Secretary.

The Chariton County Medical Society met in regular session in the office of J. Franklin Welch, Salisbury, January 26th, being called to order by Dr. H. E. Tatum. The minutes of the preceding meeting were read and approved. A clinic presented by Dr. L. A. Bozan brought forth much enthusiastic discussion. Dr. M. B. Austin read an excellent paper on "Scabies." Drs. C. A. Jennings, I. Knott and A. W. Zilman were appointed essayists for the next regular meeting, to be held in Salisbury, February 24th.

WILFRED L. BAKER, Reporter.

HOWARD COUNTY MEDICAL SOCIETY.

Dr. A. W. Moore, President.

Dr. C. W. Watts, Secretary.

The Howard County Medical Society met in regular session in the office of Dr. C. W. Watts, Fayette, February 21st, Dr. A. Moore presiding. The minutes of the January meeting were read and approved. The president introduced the subject of syphilis for general discussion. Communications were read by the secretary, one from the St. Louis Medical Society and one from the St. Louis City Hospital

Alumni Association urging the Howard County Medical Society to appeal to the representatives of this district to do what they can toward passing the bill providing for the building by the state of an institution for the care and treatment of tuberculous patients. We have written urging our representatives to act at once, as this

matter concerns the health of the whole state, and we recognize its vital importance. "Proper care for our tuberculous patients" should be the watchword of every progressive person in Missouri. Papers will be read at our March meeting by Drs. Wright, Lee and McGee.

C. W. WATTS, Reporter.

ABSTRACTS.

The Teaching of the History of Medicine.—It will, I believe, be admitted that the average physician of to-day, although he knows much more about disease and is far better equipped to treat human maladies, is possessed of much less culture and refinement, and occupies a position much lower in the regard and esteem of his fellow citizens, than the physician of fifty or a hundred years ago. This condition of affairs is largely due to the tendencies of modern education. There is a very general movement toward abbreviating the so-called undergraduate studies of students who seek a medical education in order that more and more time may be given to strictly professional work. It seems to be taken for granted by those in charge of general educational affairs that it is important to make it easier for a young man to acquire a medical education, and the natural result of this will be that more and more of the young men of the future will take up the study of medicine. Were there a dearth of physicians in our communities there might be some reason for encouraging young men to study medicine, but there being, as is well known, many more physicians in

nearly all of our communities than are needed, it seems to me that a medical education should be made more difficult instead of easier to obtain. I believe, too, that we should have better physicians and that our profession would stand higher in the public esteem if more attention were given to the study of those subjects which make for the general culture of the individual, not only in undergraduate life, but during the years of professional training as well. It is true that the horizon of medicine is constantly widening and that the hours of medical study are lengthening and becoming more and more crowded with the new details of anatomy, pathology, diagnosis, and treatment which he must master. These facts, however, do not seem to me to be good reasons for shortening either the term of preliminary education or the term of medical education, but rather, in view of all the facts, I should consider them good reasons for lengthening both terms. True, if we make it more expensive and more difficult to obtain a medical education, we shall have fewer aspirants for the medical degree. This, it seems to me, would

be a more desirable condition of affairs than exists at the present time. We need to educate fewer physicians, and we need to educate them more broadly and better. It is not sufficient for our medical schools to turn out men who are masters of the human machine, as a machine, but we need cultured, educated physicians with a breadth of mind which will make them students of human nature as long as they live and which will enable them to stand as leaders among men. Men so educated should have a knowledge, not only of the medicine of to-day, with some foresight into the medicine of the future, but also a knowledge of the medicine of the past and of the lives and struggles of those who have made the medicine of to-day what it is. Therefore, I would have the history of medicine taught as a part of the curriculum of all our medical schools.

There is no department of education which does so much to broaden the individual and give character to culture as the study of history, and no branch of human knowledge can be mastered, in the broadest sense of the word, without studying the history of the lives and struggles of those who have previously labored as pioneers in the same field. As a profession, we do not cherish and honor as we should the heroes of medicine, and if we ourselves are ignorant of the traditions and history of our science and pay little heed to them, is it any wonder that others, not of our profession, should have little knowledge of them? The names of those who have achieved great deeds in other walks of life are sung by the poet, written by the story-teller or

recorded with reverence by the historian, and their names are writ high upon the tablets of the Halls of Fame. Why should the names of the masters of medicine be forgotten and neglected? It is because we neglect them ourselves. Students of medicine are elaborately instructed concerning all the special branches of medicine and surgery, but they gain no knowledge as to who were the pioneers along the special lines they are studying, as to who first recognized and described certain diseases, who first devised and performed certain surgical operations or who first discovered and accurately described the structure and functions of certain organs. Names, to be sure, are often used, but more as adjectives than as proper nouns, since many diseases, surgical operations and anatomical structures have been given the names of those who first described them, but nothing is taught as to who these persons were, when or where they lived or what their influence was upon the science of medicine. Those who have not had their taste stimulated by at least a brief sketch of the wonderfully fascinating story of the history of medicine are deprived of a very great pleasure, the pleasure of knowing where to look and how to look and of wanting to look for more knowledge about the early history of some special department of medicine in which they are especially interested.

I am not advocating an exhaustive and elaborate course of study on the history of medicine, such as is given in our universities on general history, but it is rather a brief account of the different periods of medical history, with sketches of the lives of the lead-

ing men in each period, and a more or less detailed description of the great discoveries which have made epochs in the history of medicine, which should form a part of the broad education of every physician. Open the volume here and there and give the student a taste of its interesting contents, and he will eagerly turn to the pages himself in later life with ever-increasing pleasure and profit. There has been of late years an awakening of interest in the subject of medical history, but as yet it has not reached our medical schools, except here and there, and so far as I know there are but two regular courses of lectures given upon this subject in the United States. I feel sure, however, that the time is not far distant when the importance of broader medical education, and education which will tend to produce medical men of deeper learning, of more culture, and of greater refinement will be recognized, and when in the broader curriculum of the future there will be included a systematic course of teaching on the history of medicine.—BURNSIDE FOSTER in *New York Med. Jour.*

Vaccination of School Children Sustained by Court of Appeals in New York State.—*Opinion of the Court:*

“The appellant claims that vaccination does not tend to prevent smallpox, but tends to bring about other diseases, and that it does much harm with no good. It must be conceded that some laymen, both learned and unlearned, and some physicians of great skill and repute, do not believe that vaccination is a preventive of smallpox. The common belief, however, is that it has a decided tendency

to prevent the spread of this fearful disease and to render it less dangerous to those who contract it. While not accepted by all, it is accepted by the mass of the people as well as by most members of the medical profession. It has been general in our state and most civilized nations for generations. It is generally accepted in theory and generally applied in practice, both by the voluntary action of the people and in obedience to the command of law. Nearly every state in the Union has statutes to encourage directly or indirectly to require vaccination and this is true of most nations in Europe. It is required in nearly all the armies and navies of the world. Vaccination has been compulsory in England since 1854, and the last act upon the subject, passed in 1898, requires every child born in England to be vaccinated within six months of its birth. It is compulsory, or is aided, encouraged, and to some extent compelled, in the other European nations. It is compulsory in but few states and cities in this country, but it is countenanced or promoted in substantially all, and statutes requiring children to be vaccinated in order to attend the public schools have generally been sustained by the courts.”

The opinion further states that a common belief, like common knowledge, may be acted on by the legislature and the courts without proof, and the fact that it is not universal is not controlling, for there is scarcely any belief that is accepted by every one, and what the people believe is for the common welfare must be accepted as for the common welfare. “While we do not decide, and cannot

decide, that vaccination is a preventive of smallpox, we take judicial notice that this is the common belief of the people of the state, and with this fact as a foundation, we hold that the statute in question is a health law, enacted in a reasonable and proper exercise of the police power."—*New York Medical Journal*.

Advice to Patients with Venereal Disease.—The following instructions are printed by the Ohio State Board of Health and sent in circular form to practitioners for distribution among their patients suffering from venereal disease:

Circular of Information Adopted by the Conference of State and Provincial Boards of Health of North America.

Issued by the State Board of Health of Ohio.

We hand you this leaflet believing that you would not willingly communicate your disease to some innocent person.

Many fail to comprehend the exceedingly disastrous results that often follow these diseases. Many cases of blindness, complete disability, and not infrequently death result from them. Gonorrhœa is one of the most frequent causes of diseases peculiar to women. So serious a menace have these diseases become to the public health that the medical profession and sanitarians in all countries have

become alarmed, and are advocating measures for their prevention.

Syphilis (pox) is especially a disease from which innocent persons may suffer, as it usually produces sores in the mouth or on the lips, hence may be conveyed by kissing, drinking from the same cup, or using anything which has been put to the lips or into the mouth of one affected by the disease.

These diseases are often communicated when the patient thinks he has recovered. Hence marriages contracted at this time of the disease result in much unhappiness, and often in the death of the wife. To protect yourself and others, we earnestly advise the following in the interest of prevention of your disease:

Follow strictly the advice of your doctor, and use no other treatment.

Remember that it takes a long time to recover entirely.

Carefully wash your hands with soap and hot water whenever you handle the private parts.

Do not have intercourse and avoid all sexual excitement until your physician says you are completely cured. Be especially careful not to rub your eyes with your fingers.

Do not allow any person to use any cup, glass, spoon, fork, or anything that you have had put in your mouth.

Do not kiss any one or wipe the face of a child with a handkerchief you have used. Always use a separate towel. Burn all cloths or cotton soiled by discharges.

SOCIETY PROCEEDINGS.

THE ST. LOUIS MEDICAL SOCIETY.

REPORT OF A CASE OF HYDROPHOBIA (RABIES).

Meeting of January 28, 1905.

Dr. B. A. Wilkes read this paper, for which see page 469.

DISCUSSION.

Dr. Joseph Grindon said Dr. Fisch had told them what the Naegeli bodies were not. Could he tell what they were?

Dr. A. R. Kieffer had been an eye witness to a well-marked case of hydrophobia. The patient was a man about forty-eight years old, of unusual physique. He had been bitten in the hand by a dog, and had the wound cauterized at once. Forty-six days afterward he found, upon arising one morning, that he could not drink water owing to a spasm of the muscles of deglutition. The spasms increased in frequency throughout the day. Dr. Kieffer's vigil commenced that night, and the next evening the man died. This man had none of the barking of a dog, none of the dread of water, but could not control the muscles of deglutition. Immediately he would try to swallow there would be a spasm. He did not attempt to do bodily violence to anyone, though he feared this, and, as he was perfectly conscious, insisted upon everyone staying out of the room. At that time the belief was growing in the country that hydrophobia was merely a nervous explosion due to

a dread of the disease. This case furnished a good opportunity to refute that theory. The dog that had bitten the patient had also bitten a steer on the same date. The steer became mad and died.

REPORT OF CASES—SEVERE ELECTRICAL BURN.

Dr. Ernest H. Spooner reported a case of severe electrical burn. The patient was a young man of twenty-six, had received six thousand volts and was still alive. The index finger, thumb and wrist of the right hand were partly burned through; the left arm was burned through; the tendons at the wrist and part of the palm were badly burned. The left leg was burned about the knee and some of the tendons severed, and in falling some twenty feet, where the foreman of the works caught him, he got a bruise between the shoulders and part of the scalp was severed. His temperature had not been over 101, there was no pus except a very little in the right foot, but necrosis had set in in the right hand very freely. If there was anyone present who had had experience with such a condition and would offer suggestions, they would be very welcome.

Meeting of February 4, 1905.

PHLEBITIS FOLLOWING ABDOMINAL OPERATIONS.

Dr. Robert M. Funkhouser read a paper with above title, for which see page 461.

DISCUSSION.

Dr. C. C. Morris said phlebitis following abdominal operations was due to different causes. Fortunately, the condition had a low percentage—Kelley stating that less than one in one hundred occurred in his experience. He had one case following the removal of a large ovarian cyst. The patient had been tapped about thirty times, the last time about three weeks before the operation. There

were no adhesions, but a single pedicle, and the operation was performed without any difficulty. Phlebitis in the left leg developed in about two weeks. The condition was treated with warm applications of lead and opium covered with rubber tissue, and the patient recovered in about six weeks.

Dr. Ernest Jonas said that at the last meeting of the American Surgical Association Dr. Richardson, of Boston, classed this condition as among the unavoidable accidents after operation. Dr. Richardson said that none of the reasons given by Dr. Funkhouser were

sufficient to be considered as the real cause of the condition. Dr. Funkhouser mentioned tight bandaging, but the speaker had seen the very same trouble arise with simple collodian dressing. Good circulation might sometimes be responsible for this condition. Young, healthy individuals sometimes submitted to operation, as in appendicitis cases, for instance. A man used to an active life is put to bed, and in this way there is taken away from him the muscular power of pumping the blood through the lower extremities onward toward the heart. Stagnation established in this manner might have something to do with the condition. The constipation given as a reason might help to produce thrombosis on the left side, as the pressure of the sigmoid flexure upon the iliac vein might result in an impeded circulation. One other fact might explain why this condition is more frequently found on the left side, and that is the anatomical course of the veins. At the division of the vena cava into the right and left common iliac veins, the right iliac vein passes under the right iliac artery, while the left iliac vein passes, first, under the right iliac artery and then crosses over and passes beneath the left iliac artery. He had heard this suggestion made by Dr. Keen, of Philadelphia.

Dr. A. R. Kieffer said phlebitis had occurred once in his experience in a case of recurrent appendicitis. The operation was very simple, and in a week the stitches were taken out. Two days later patient had some pain in one extremity, but thought it was rheumatism, but it was soon found to be a phlebitis. An unusual case was caused by the tipping over of a stool when boarding a train. The patient was found to have a swelling of the calf of the leg, and thought an abscess was forming. He returned to St. Louis, and the speaker was called in. He applied a poultice, but found that no abscess was forming, but that it was an ordinary phlebitis, and he explained the danger of a breaking off of a piece of the clot. The patient, however, was a traveling man, and his house got impatient and forced him out against the physician's advice. Exactly what occurred after he had reached his room in the hotel at Little Rock

would never be known, but the next morning the man was found dead where he had fallen with bleeding from the mouth.

Dr. W. G. Moore said that last summer a year ago he had been called to see a young man who had been in perfect health. He had spent his vacation in the east, and said he had walked something like a million miles. He sent for a physician on account of a soreness in the leg. It was an unmistakable phlebitis, and developed in both legs. At the end of three days from the date of the attack he felt he was doing so well that he would go to the office on the following Monday. This was on Saturday, and he was resting in bed comfortably. His wife took some strawberries to his room, and he asked her why she did not bring him a good dinner, turned over to eat the berries and died instantly. Dr. Moore had seen several cases in typhoid fever, but this was unique in that it occurred in both limbs and in its fatal termination.

Dr. Funkhouser, in closing, said, in regard to the peculiar anatomical distribution of the veins, attention had been called to that by Vandivere in 1900. In this case he knew all that was to be known of it. There was no soreness during the first nine days. Another point was that it was so long in getting well. She was operated upon in September, 1903. He might have considered it simply a coincidence that this phlebitis developed after the appendectomy, but that so many cases occurred after abdominal and pelvic operations. He had already called attention to the fact that in recovering from the appendicitis she had more or less pain in her legs, although then there was to be seen no inflammation. Another point of interest was that after the symptoms of phlebitis subsided neuritis occurred. He could understand how the other condition might have had a great deal to do with the neuritis. The leg was beginning to show a slight shrinkage, an atrophic condition due to lack of exercise. Although he believed the proper treatment of neuritis was rest, he did believe that in such a case they would be amiss not to use massage. He had discussed this with a number of physicians, and with one consent they had said not to try massage.

PRESENTATION OF CASES.

Dr. John Young Brown presented four patients on whom he and his assistants, Drs. Wm. J. Doyle and Walter C. G. Kirchner, had operated for multiple bowel perforations, the result of perforating gunshot wounds of the abdomen. All of these cases were resection cases; in one case seven feet two inches of small bowel were resected; another six feet, another two feet and another eighteen inches. All cases had been operated on immediately on admission to the hospital, and the methods followed in each case were practically the same. He wished to call special attention to the importance of systematic search in dealing with cases of this character. He recommended that the stomach and transverse colon be first examined, that the colon then be thrown back and the small bowel picked up at the angle of Tritz, as is done in gastro-enterostomy work. The small bowel is then traced to the ilio-cecal valve, the large bowel is then gone over. By a systematic search of this character it is impossible to overlook perforations.

In regard to resection of bowel in cases of this character he was convinced that the button furnished the best means of making an anastomosis. Of the four patients presented, the button was used. He felt that irrigation with hot salt solution was beneficial not only for cleansing the abdomen of extravasated fecal matter and blood, but it acted as a powerful stimulant in such cases.

Regarding drainage, he was convinced from a wide experience that gauze should never be used as a drain. He advocated the use of the glass drain introduced through a stab wound above the pubes and tube placed in vesico-rectal pouch, the patient put in the exaggerated Fowler position immediately and the tube cleaned by suction.

He requested the society to examine the patients, and called attention to the perfect healing of the long wounds, as shown in each case. He considered the group of cases presented of great interest, and through the subject of gunshot wounds should be fully discussed, as there were many patients dying daily all over the country whose lives could be saved by early and thorough work.

DISCUSSION.

Dr. H. C. Dalton expressed appreciation of Dr. Brown's cases and his manner of presentation. The cases spoke for themselves. His remarks had been very interesting, especially the manner in which he made the investigation. A very important point was that when the abdomen was opened a search should be first made for bleeding wounds. The speaker had lost one case by simply stitching up the wounds as they appeared. The patient was getting rapidly weak, and he found the mesenteric artery bleeding profusely, and he believed the patient had lost his life in consequence of this. The point Dr. Brown had made, that perforation was sufficient warrant for opening the abdomen, was generally accepted. At a meeting of the Missouri State Medical Association a surgeon had stated that he would always wait for symptoms before opening the abdomen. Such symptoms simply meant peritonitis, and that was a death certificate in these cases.

Dr. Malvern B. Clopton said there was a certain significance attached to the part of the intestine injured. The percentage of recoveries was influenced by the distance of the injury from the pylorus. The time that elapsed before operation was also of great importance.

Dr. Willard Bartlett also wished to know what part of the intestine had been removed, but asked for another reason. The physiological importance of the small intestine decreased as it left the pylorus, and for that reason he desired to know what portion had been removed. It was astonishing how much of the intestine could be resected. He wondered if Dr. Brown could tell them just how much intestine had been resected. The greatest he knew of was twelve feet, but he knew that more than that had been resected. Two points had interested him particularly; one was in regard to the glass drainage tube. He had not used a glass tube since having found one broken in the abdomen. He had found the woman, who had been operated upon a day or two before, with the glass tube broken in several pieces. He had picked out the pieces, and nothing happened. Nobody

could explain how it occurred. The patient was not aware that the tube was broken. This circumstance had kept him from ever putting a glass tube in the abdomen, although it did drain better in the hands of others who used it. He said that he would like to know what size vessels of the mesentery could be torn off without gangrene. Recently, in operating upon an interim appendix case, in which everything was favorable, he had inadvertently put his hand through the mesentery and torn off two small arteries. He had labored under considerable consternation, and his first thought had been to reset that portion of the bowel, but the anesthetist said the patient could not stand anything of that kind, so he had simply closed the abdomen after ligating the vessels. The patient's bowels moved next day, and she called for food on the second day, and had made uninterrupted progress. The two arteries were torn within half an inch of the intestine. Dr. Bartlett appreciated Dr. Brown's paper the more because the City Hospital men got most of these cases, consequently their remarks were instructive.

Captain Llewellyn Williams, as a military surgeon, was interested in Dr. Brown's paper. After seeing the witnesses and hearing his paper he agreed that operation was indicated. But he doubted whether in all penetrating wounds the abdomen should be opened and explored. Their experience at Santiago had proved that. The conditions in the field were very different from those in the hospital. The bullet used in the army was of a very different character. The army bullet was a 30-caliber, nickel-tipped bullet, traveling at a much greater velocity and making an entirely different wound. He had seen any number of wounds at Santiago from which the patients made a remarkable recovery under nothing more than expectant treatment. It was true that he had no way of knowing that the wounds in the abdomen had been perforating wounds, but from the wounds of entrance and the wounds of exit it seemed almost impossible to believe that they did not perforate. In one case that he remembered the bullet entered the right groin and passed out through the left kidney. The patient was carried fifteen miles, but made a recovery. Wounded men receive attention on the firing line, at the dressing station, at the ambu-

lance station and at the field hospital. The field hospital must necessarily be a long way from the advancing troops. By the time the patient had reached the field hospital, if he had had a perforating wound, peritonitis would certainly have set in. The mortality, when the abdomen was opened by even skilled operators, was extremely high, while, where they were not handled, many made excellent recovery.

Dr. Paul Y. Tupper said that his experience along the line of Dr. Brown's paper was not great enough to warrant his being dogmatic, but it enabled him to appreciate fully the practical points of the essay. He thought the point relative to liver hemorrhage well worth consideration. The attempt to control such hemorrhages by stitches frequently results in failure and embarrassment and the operation is thus unduly protracted. It is eminently practical to control liver hemorrhages by packing and because of its effectiveness and quickness of application it is preferable to the suture method. He had not found the gauze drain a satisfactory one and not infrequently disastrous results are produced in removing the drain. It becomes firmly attached to the intestines and in removing it, when the serous covering suffers injury, there frequently follows a fecal fistula. The old-fashioned glass drain, notwithstanding Dr. Bartlett's experience, appealed to him. He had seen one broken, but this probably resulted from a little awkwardness on the part of the one doing the dressing. A wick was being carried into the depth of the tube with a long narrow pair of forceps and in some way the tube was broken by the impact. This, however, should not have occurred and is no argument against the glass tube. A matter of the greatest moment in gunshot wounds of the abdominal cavity is the injury to the blood vessels supplying the intestines. Immediately after the injury it is difficult to tell definitely, because of the peculiar fanshaped arrangement of the arteries, from how much of the intestine the blood supply is actually cut off. The anastomosis of the vessels, though active and rich cannot with too great certainty be relied upon. It is better to err on the extreme of excising a little too much of the intestine than to making the section within the area of doubtful blood supply.

Dr. Brown has struck the right note in emphasizing necessity of quick, effective work with minimum blood exposure.

Dr. A. R. Kieffer said that one of the greatest questions in surgery was the matter of drainage. In putting in a drain the opportunity for after-treatment had not been emphasized. He believed it was the experience of everybody that they had been convinced of having infected a wound from examining a wound even so late as at the time of removing the sutures. To put in a glass drain after the method of Dr. Brown required that it be emptied every three or four hours. Every precaution must be practiced every time it was emptied. Until the area had been walled off one must be absolutely aseptic and that was a condition of affairs that could be trusted to very few assistants and fewer nurses, and in a field hospital he imagined that it would be pretty nearly impossible. The objection that a gauze drain adhered to the bowel could be overcome by wrapping it in gutta percha tissue. Another advantage was that it was not necessary to remove it as soon as was usually done. If it was doing no harm it was a good idea to leave it until the adhesions were stronger. He had never regretted leaving a drain in. Of course, if there was a large wound and danger of hernia afterward, one would want to remove the drain early. He knew of no plan that presented so great an opportunity for draining and so little opportunity for doing damage as the Mikulicz plan, it could be removed so easily without injury to the adhesions, pulling it diametrically perpendicular to the surface one was working on.

Dr. Robert Funkhouser wished to emphasize a point brought out by Dr. Dalton, namely, the necessity for finding all the bleeding points. During the past four years he had been reminded of that by seeing cases in which that had not been done. Whether it was due to an oversight or the inability to discover the bleeding points, he did not know, but the parties had come to their death from hemorrhage. The most difficult places to control hemorrhage were in liver and spleen, and Dr. Brown's method was most excellent. While it might be best to open the abdomen in every case, from information he had received from a brother at Santiago, from what he had since read and

from Captain Williams' remarks, the evidence seemed to be against opening the abdomen in military practice. The mortality was evidently greater where these cases were operated upon than when they were let alone. He had heard (though he was not certain that the information was correct), that the Japanese did not, as a rule, pursue the practice recommended by Dr. Brown, yet their mortality had not been great. So perhaps it would be correct to observe the rule of Dr. Brown in civil practice, but it was a question whether it should be the rule in all practice. He had had but little experience with gunshot wounds in private practice, but he preferred the wick covered with gutta percha. He questioned whether the glass tube was best, it certainly was not where the ends were perforated. He believed the ideal drainage was gauze surrounded by some material. The one he preferred was rubber, so as to prevent adhesions.

Dr. John C. Morfit said that these patients spoke for themselves and he asked the essayist to say something for those who had been operated on under similar conditions and could not speak for themselves. In these cases, aside from the superb technique practiced in the city institutions, there were several points of interest; one was the immediate operation. In the case where seven feet of the intestine had been removed the patient had been operated upon within an hour. He had a chance to operate before hemorrhage had more than begun. The relative time at which such cases were gotten in civil practice and in military practice put them under a different head, there was a different prognosis and a different mortality. Another point was the position. The question whether a gauze or a glass tube was used was of less importance than the position.

Dr. Francis Reder considered the character of the work of Dr. Brown most excellent in every respect. The doctor had referred to bad surgery of the stomach. He thought that a man qualified to enter the abdominal cavity would hardly look at any entrance in the abdominal cavity as bad surgery. In anterior and posterior wounds of the stomach it was not always an easy matter to get at the posterior wounds. He had had one case where he had enlarged the wound in the anterior wall and caused the posterior wound to

come to view and had closed it, placing a purse-string suture around it. As to opening or not opening the abdomen, there was one thing the military surgeon had to his advantage, and that was that there was often an empty alimentary tract, and possibly it was to that fact that might be due some of the happy results in cases not operated upon. The question of drainage would be always discussed. By placing the patient in the exaggerated Fowler position it gave a cup to receive the drainage and it seemed only reasonable to place the drainage tube in the lowest part of that cup. The gauze drain was a very poor drain in the abdominal cavity, and he had come to the conclusion that those patients who recovered with the gauze drain would have recovered without any drain at all. The gauze drain would dry up. The gauze drain in cavities where there was pus, and where there was a large opening was the only drain, but where there was no pus formation the only drain was the glass drain.

Dr. Walter C. G. Kirchner said that with reference to the case he had operated upon a few points would answer some of the questions put. There were nine perforations, most of which were in the jejunum. The nine perforations extended over about six feet of the bowel. A patient could tolerate a great resection when that resection was made in the lower part of the bowel. For that reason the first four perforations were sutured and the others resected. It was important to save as much of the jejunum as possible. At the time these patients were operated upon the intestines were full and the lymphatics were distended. As to perforations of the mesentery, when the vessels below the arch were injured the damage was not so likely to be great as when the injury was high up. He did not consider an injury to one of the branches high up as serious as an injury near the root. The matter of flushing was of great importance and it should always be carried out in resection cases. In this particular case after the large drainage tube was put in a large quantity of blood was removed, pieces of clothing and clots. A little water was dangerous. When flushing was done at all it should be thoroughly done. One of the speakers had inquired about those patients that could not speak for themselves. One of those patients he had followed to the

morgue, and the result of the examination showed that he had been shot through the lung, through the pericardium, the heart muscle, the diaphragm, the omentum and mesentery, the jejunum had been nearly severed, there were two perforations of the stomach and perforations of the spleen, liver and gall bladder. Of course, there were many cases that did not recover.

Dr. John Young Brown heartily agreed with Dr. Carson regarding the value of an exploratory incision. Many cases reached the surgeon too late. That was especially true of cancer of the uterus. The only absolute method of determining the condition was accomplished through a vaginal examination in the one case and an exploratory incision in the other. He had recently operated upon two cases that showed the necessity for an exploratory incision. In one case the patient had seen two good physicians of St. Louis, one of whom made a diagnosis of gastric ulcer, the other was diagnosed malignancy. When he operated Dr. Brown found a handful of gall stones in the gall bladder and three in the common duct. The other case diagnosed as malignancy was a tubercular peritonitis. It was a lamentable fact that the clinician was rarely seen in the operating room. The surgeon was beginning now to demonstrate that the exploratory incision in capable hands was without danger and enabled them to clear up a great deal in cases of this kind. There was no more perfect chapter in surgery than surgery of the stomach. Resection work had been made comparatively easy, and by tying off the blood supply at the four corners it could be accomplished very quickly and with no loss of blood. He did not agree with Dr. Carson that radical work should always be done in malignancy of the stomach. In many cases there were extensive adhesions and it was better to do a simple gastro-enterostomy for relief. Where malignancy was diagnosed early radical work should always be done.

Dr. Brown, in closing, replied first to Dr. Clopton's question as to what portion of the bowel had been removed, stating that the bulk of it was the small bowel and ileum. As to the remarks of Dr. Myer, his own ideas in regard to the physiology of digestion had been shocked very materially by the three cases that he had seen. In two cases their diges-

tion was apparently as good if not better than before. The negro had gained in weight and the white man was, if anything, a little heavier than when he entered the hospital. Another thing he had discussed with Dr. Myer was the patient whom he had operated upon, removing all the large bowel except the sigmoid. Instead of having diarrhoea, as would have been expected, the woman was constipated, and had to take medicine continually. Dr. Brown endorsed everything Captain Williams had said. The course pursued by military surgeons was a wise one. The point he had wished to make was that the teaching to leave these cases alone was a bad one in civil practice. Such teaching would tend to lead surgeons to include those cases where there was opportunity to do good surgery. He would question the diagnosis of perforation when the patient recovered. He had done any number of exploratory operations and never had a death from the procedure. Replying to Dr. Kieffer relative to the after-treatment, he thought the question of drainage would be under discussion in the year 2000. One man drained with gauze and got good results, another used a glass tube and had equally as good results, while a third would use rubber. It made no material difference. He had good results with the glass drain. The danger of infection with that drain he thought a point not well taken, if the intestine was pulled up and the tube placed in vesicorectal pouch with no bowel under it, the

dressing put on and the rubber dam properly used for protection. Of course, it was necessary to be scrupulously careful in draining tube with syringe, and the technic used should be that used in handling all other clean wounds. There was another form of drainage, and that was the drainage done by the rectal and the stomach tube. He knew of no method so important as the washing out of the stomach and the use of the rectal tube. Another point was the use of narcotics after a laparotomy. Though they got the worst sort of cases at the City Hospital, it was exceedingly rare that a hypodermic of morphine was given. No matter what abdominal operation was done the patient would have a stormy time during the first twenty-four hours. The wards there were all dormitory wards, and if the patient was raising a good deal of disturbance a hypodermic of morphine was given to protect the other patients. As to drainage, they were inclined to be practical rather than theoretical. A few years ago certain surgeons had advocated standing patients on their heads and draining through the lymphatics, now they raised them up and drained through the pelvis. He had once asked a distinguished surgeon what his method of after-treatment was in abdominal surgery and the reply was: "If I find my patient doing well after twelve hours I am so glad of it I leave them alone." This advice he considered good, as much harm can be done by unnecessary medication.

Meeting of February 11, 1905.

SPECIMEN OF CANCER OF THE STOMACH.

BY DR. N. B. CARSON.

This case I saw some weeks ago, and advised operation. At that time I could make out a tumor about the size of a hen's egg in the epigastric region and freely movable. There was no question as to the character of the tumor. We advised an operation purely exploratory, the subsequent steps to depend upon what was found. The patient did not accept until about two weeks ago, when she came to the hospital and said she desired an operation. She said she understood fully the dangers and possibility. We told her that the growth had decidedly increased, and that

it might be necessary to merely close up the wound without further operative procedure.

The patient was admitted to the hospital January 24th. She was thirty-nine years of age, white, born in St. Louis. The diagnosis was carcinoma of the stomach. The patient died the night following operation. Father and mother dead; cause of death unknown. One sister and a half-sister died of tuberculosis. The patient had been delicate before her marriage, but after that had been in good health. She had been married fifteen years; had never been pregnant.

This specimen shows two or three interesting features. One in particular I will refer to later, and I would like to have those who discuss the matter express their opinion as to the condition we see here. I have always believed that whenever we have decided symptoms of malignancy, symptoms sufficient to lead us to conclude that we have a malignant condition, an exploratory operation is justifiable, whether we can make out the presence of a tumor or not. A great many believe that where a tumor is present it is too late, but I beg to disagree with them. I have known of a number of cases in which the patient was made comfortable by an operation, and remained so for a long time. The case I reported to the society recently is an example. We found a large involvement of the stomach, requiring the removal of four-fifths of the stomach and a portion of the transverse colon. We did not recognize that the transverse colon was involved, or we would not have undertaken to remove the stomach, but when we had gone so far there was nothing to do but complete the operation. I heard from that patient a little less than two weeks ago, and he was then well and enjoying life. When I operated he was in every way a great sufferer. Within thirty-six hours he was perfectly comfortable, and had had not an uncomfortable feeling from that time until he left the hospital.

In the present case we found a tumor freely movable involving the lesser curvature of the stomach. It was so movable that I thought I could take it away. Later I found it impossible, and the condition was such that further operative procedure had to be desisted from and the abdomen closed. I do not believe a gastroenterostomy would have changed the result.

You may ask why I undertook this operation, where so much was involved. I believe that where a cancerous growth can be removed it should be. I have seen beneficial results follow cases that appeared most hopeless. We should give the patient the benefit of the doubt. You will find that some surgeons agree with me, that when we come upon a cancerous growth in the stomach it should be removed. Some of them argue that the disease is never so extensive but that it can be taken away. I do not agree with that, as there are cases where it is not possible, as

in this case, where we desisted from operation.

That brings up another point: whether small incisions will enable us to decide positively. I believe we must make a large and free incision. We do no harm, and the patient can be gotten up very shortly afterward and suffer no harm from an exploratory operation.

Another point is the idea that many of these malignant growths are grafted upon old ulcers. I think that the disease often presents the appearance of an old ulcer. I questioned this patient very closely to find out whether she had had any previous symptoms of gastric ulcer, but could find none, yet when we opened the stomach I found a mass that might have led us to think that such a condition existed. I really believe that many cases where the disease is supposed to have its origin in gastric ulcer are mistaken ones. I believe it is stated that from 2 to 5 per cent. of all cases of stomach trouble are gastric ulcers. In my experience I do not believe I have seen more than fifteen cases of gastric ulcer where the diagnosis was positively made. I know the number of cases I have seen is a great deal less than 1 per cent. I believe, too, that this idea leads us to many unnecessary operations. I heard today of a surgeon who said that gastric ulcers were of two classes, surgical and medical. Those of the first class were plainly demonstrable, while those of the second class often required a long search to find the lesion. In one case, wherein there had been a hemorrhage, they finally found a small bleeding point from which blood was escaping, and they called this an ulcer. I think that little bones, etc., often get into the stomach, causing such a condition. I have in my possession the breast bone of a quail, very sharp at the ends, that passed through the alimentary canal to the sigmoid flexure at the brim of the pelvis, and there became lodged, the inflammation resulting forming a stricture. While operating on this case I had my hands gloved, and in examining the bowel my glove caught on the projecting piece. I removed it, finding it had ulcerated completely through the bowel. This shows us what damage may be done to the alimentary canal by the passage of sharp articles. I have no doubt many hemorrhages are due to the abrasions caused

by such foreign bodies, and if let alone they would heal, and the operation would not be necessary to heal these so-called medical ulcers.

DISCUSSION.

Dr. W. E. Fischel said that Dr. Carson had made the very heroic statement that to him it seemed advisable to remove a malignant growth no matter where located, under all circumstances; in other words, that it made no difference whether the tumor involved only a small area of the stomach or perhaps the entire stomach and a part of the bowel, it was the duty of the surgeon to remove the growth. If that position of the doctor's was tenable it would lessen very materially the work of the internist. The work of the surgeon as well as that of the physician should not be depreciated. It was important to the physician particularly in malignant conditions of the stomach, to recognize that condition as early as possible. That that was sometimes impossible was demonstrated by Dr. Carson's statement that this patient, just seven weeks before she entered the hospital was perfectly well. There was absolutely no reason to suspect there was any stomach trouble, making an early diagnosis impossible. But a tumor that had invaded as much territory as this one, must have lasted more than a few weeks. This brought out the point that an individual might have a malignant trouble for an indifferent time and be comfortable, and that brought up the question whether it was always justifiable to remove every malignant growth. Every one could remember cases where malignancy was diagnosed and yet the patient lived in comparative comfort beyond the allotted time of two years. As to the early recognition of cancer, it was often absolutely impossible to recognize a malignant trouble early. He did not, however, believe it as impossible as it was often said to be. The fault was often with the physician and the reason the physicians were at fault in determining early the presence of malignant trouble was that they were too routine in their work. They bore in mind certain facts and when those facts were exhausted they grew careless and looked no further. No one symptom could be regarded as pathognomonic of serious trouble, let alone malignant trouble. The result of the analysis of the stomach contents was not always absolutely

symptomatic, the impaired mobility and impaired absorptive power were not pathognomonic of malignancy. One might have no hydrochloric acid or one might have lactic acid and have no malignancy, or one might have a normal hydrochloric acid and no lactic acid and yet have malignancy. There might be an immensely dilated stomach and yet no malignancy. There might be a leucocytosis so marked that one could not help suspecting malignancy, yet there might be no such condition. The condition could not be diagnosed by ten symptoms. Those symptoms were after all only contributory. There must be taken into account the history of the case and the appearance of the patient. One individual would sometimes see in the aspect of his patient what a colleague equally expert would not see. The appearance of the patient, together with the history and what could be discovered by careful clinical and microscopical examination, enabled the physician to make a diagnosis. Dr. Fischel said he should like to argue with Dr. Carson on the possibility of gastric ulcer being favorable ground for malignant degeneration. Dr. Carson had based his belief upon the fact that he had seen but few gastric ulcers. The speaker had seen a great many cases in his experience and in this case he thought it entirely possible that the point that seemed to indicate the original hardening was possibly a gastric ulcer. Of course malignant trouble usually involved first the mucosa and as it progressed took in all the layers of the stomach and it seemed entirely possible that in this case the cancerous growth had had its origin in an ulcer.

Dr. Carson said that he had not intended to imply that because the growth was so extensive it did not have its origin in an ulcer. He had simply meant that the appearance of the mass was such that he had thought ulcer could be excluded.

Dr. Fischel added that even in view of such a result as that in the case reported by Dr. Carson some time ago and which had reflected such great credit on the surgery of this western country, he could not help feeling that one sometimes came in contact with malignant disease of the stomach or bowel where the tumor could be felt, where emaciation existed and where a period of latency seemed to have arrived, the patient suddenly began

to gain strength and flesh and went on a long time in comparative comfort. He had a patient of that kind under observation at the present time. A year ago that patient looked as if she would die very shortly, yet within the last year she had gained in weight and was comfortable and happy. In malignant trouble there were often periods of rest. He believed that the statistics given by the surgeons as to the number of cases that got well and the number that succumbed to metastases were necessarily inaccurate.

Dr. Jessie S. Myer, referring to the question of the development of carcinoma on the basis of gastric ulcer, said this was not the sort of case in which he would expect to find the carcinoma developed on an ulcer. A patient who had never presented any symptoms could hardly be expected to have had gastric ulcer. There was no other way of knowing that the carcinoma did or did not develop on the basis of an ulcer. The only way one could decide that question was from the history of the case pure and simple. Three or four years ago Dr. Carson had operated upon a case in which there was a typical carcinomatous ulcer, yet prior to the occurrence of the condition necessitating operation, the patient had presented no symptoms. When a patient gave a history characteristic of gastric ulcer and which had existed, perhaps, a number of years before the development of carcinoma, it was but reasonable to conclude that the carcinoma had resulted from the ulcer. By way of illustration he referred to the case of a physician who had died here several years ago. Dr. Myer had seen the patient some two years before his death and at that time he presented symptoms typical of gastric ulcer. Two years later a physician called him up and asked him what he had found. Dr. Myer had replied that there was a marked superacidity. The physician then said that the patient had no tumor, but that there was a total and persistent absence of hydrochloric acid. That man had evidently had an ulcer of the stomach upon which had developed the carcinoma, but no examination would have revealed that. In the patient operated upon by Dr. Carson there was a carcinomatous ulcer about the size of a dollar, yet but five or six weeks before there were no symptoms. When gastric disturbance arose suddenly in a patient over

fifty, with rapid loss of weight, total and persistent absence of hydrochloric acid and presence of lactic acid, those were the cases where tumor should not be waited for. Whenever there was reason to suspect the possibility of a carcinoma of the stomach, then the case became a surgical one. The physician should not wait until the tumor became as large as one's head, yet even those cases might be operable. He recalled one case in which there was a tumor as large as the fist, the patient had lost weight, there was present lactic acid and an absence of hydrochloric acid and all the typical symptoms of carcinoma. He advised operation and the patient decided to go to New York and have it done. Some months later that patient had walked into the office so changed in appearance that the doctor failed to recognize him. He was fat and healthy and stated that the doctor in New York had cut his stomach out and put in a new one. That man would doubtless have at least two or three years of comparative comfort. It was possible to go to the opposite extreme and recommend surgical interference too early. Hydrochloric acid might disappear for a time and carcinoma be suspected, yet carcinoma might not exist. As an example he mentioned the case of a gentleman he had examined two years ago and to whom he had recommended an exploratory operation. That patient had regained the sixty pounds he had lost and was in as good health as ever, yet two years ago there was a total absence of hydrochloric acid and presence of lactic acid, the patient was over fifty years of age and there had been rapid loss of weight, yet that patient was in perfect health to-day. Therefore, they should try to strike a happy medium and avoid recommending surgical interference too early or too late.

Dr. F. Fahlen said that one case Dr. Smith had at Mullanphy Hospital might show the correctness of Dr. Fischel's statement, that taking any one symptom as pathognomonic would be a mistake. In that case the greater curvature was three inches below the level of the umbilicus, there was vomiting, peristalsis was easily seen through the stomach wall, tumor was present, yet there was present hydrochloric acid and no lactic acid. This was shown by four or five examinations, yet there was no question about its being a carcinoma of the stomach.

Dr. John Young Brown heartily agreed with Dr. Carson regarding the value of an exploratory incision. Many cases reached the surgeon too late. That was especially true of cancer of the uterus. The only absolute method of determining the condition was by an exploratory incision. He had recently operated upon two cases that showed the necessity for an exploratory incision. In one case the patient had seen two good physicians of St. Louis, one of whom made a diagnosis of gastric ulcer, the other diagnosed malignancy. When he operated, Dr. Brown found a handful of gall stones in the gall bladder and three in the common duct. Another case diagnosed as malignancy was a tubercular peritonitis. It was a lamentable fact that the clinician was rarely seen in the operating room. The surgeon was beginning now to demonstrate that the exploratory incision in capable hands was without danger and enabled them to clear up a great deal in cases of this kind. There was no more perfect chapter in surgery than surgery of the stomach. Resection work had been made comparatively easy, and by tying off the blood supply it could be accomplished very quickly. He did not agree with Dr. Carson, that radical work should always be done. In many cases there were extensive adhesions, and it was better to do a simple gastro-enterostomy for relief. Where malignancy was diagnosed early, radical work should be done.

Dr. C. A. Snodgrass said that probably no field had taxed the physician more than the upper abdomen, or brought more practical results to the surgeon. He had known that surgeons would say something of interest, and also the clinicians. He had been glad to hear the remarks with reference to the findings in stomach analyses. For the last year he had been making the analyses at the City Hospital, and he had with him a record of fifteen cases, eight of them malignant, and had been followed to the surgeon, four were gastritis and three miscellaneous cases. In the future he intended to follow up this work more in the research line than he had done in the past. He had made a quantitative analysis in all cases for hydrochloric and lactic acid, and in most cases he had made a microscopic examination. In making the test for lactic acid he used two test tubes, and put in 7 c. c. of water, added 3 drams of perchloride of iron.

One of these tubes was used as a control. Into the other was placed a small platinum loop of lactic acid as a guide. Then the stomach contents was added drop by drop. In that way a relatively accurate result was secured. These cases were all followed to autopsy:

Case 1.—Total acidity, 5; free hydrochloric acid, absent; lactic acid, only a trace.

Case 2.—Total acidity, 15; free hydrochloric acid, none; lactic acid, only a trace.

Case 3.—Total acidity, 40; free hydrochloric acid, 25; lactic acid, none.

Case 4.—Total acidity, 80; free hydrochloric acid, 60; lactic acid, none.

These cases were adenocarcinoma, no ulcer conditions noticeable:

Case 5.—Total acidity, 57.5; free hydrochloric acid, 10; lactic acid, none.

Case 6.—Two analyses. Total acidity, 12, 25; free hydrochloric acid, none, none; lactic acid, only a trace, none.

Case 7.—Total acidity, 10; free hydrochloric acid, none; lactic acid, only a trace.

Case 8.—Total acidity, 28; free hydrochloric acid, none; lactic acid, only a trace.

From those tests he had made the following observations:

Blood microscopically found in only 25 per cent. of the cases. At least 50 per cent. contained large quantities of mucus. Seventy-five per cent. showed acidity below the normal. Hydrochloric acid was below the normal. No case showed excess of lactic acid. Microscopically blood was found in but two of the cases. As a result of these observations his conclusions were that the total acidity and free hydrochloric acid were generally below the normal, not always; that lactic acid was not usually found in large quantity; that blood was not found microscopically or macroscopically as a rule. In six cases of chronic gastritis the total acidity was not increased, hydrochloric acid was always diminished or absent, and in most cases after the Ewald breakfast he found a high lactic acidity. There was a low acidity, both total and free in gastric ulcer. His general conclusions were that the history and stomach analysis combined was the most sure method of diagnosis of acute gastritis; that carcinoma might exist and nothing in the stomach be found that was pathognomonic; that the finding of a tumor mass in the upper abdomen did not warrant a

diagnosis of cancer of any kind in that region, though the stomach analysis might bear out that diagnosis. That was illustrated by one of the cases Dr. Brown had mentioned. It had been decided that the condition was probably a malignant involvement of the colon, but when the abdomen was opened the tumor was found to be the head of a normal pancreas. There was present a tubercular peritonitis. His final conclusion was that there was no other way to absolutely diagnose chronic gastritis and cancer of the stomach than by an exploratory laparotomy.

Dr. Charles Shattinger thought that this question of the chemical findings in diagnosis should have been settled long ago. If the cancerous infection invaded the glands producing hydrochloric acid sufficiently to put them out of function, then there would be no hydrochloric acid. If it did not do enough damage to put them out of function, then there would be hydrochloric acid. He thought that was a matter that had been settled long ago and that they all knew how to make a differential diagnosis between cancer of the stomach and chronic gastritis. He thought that none of them would be prepared to go on the operating table to permit a diagnosis of chronic gastric catarrh.

Dr. Fischel said that he had a feeling that Dr. Shattinger was attacking those who had discussed the subject. It gave him untold pleasure to know that their august body solved problems that had never before been solved and it also gave him very great pleasure to hear matters of general interest discussed even though some of the facts brought out were not entirely new.

Dr. N. B. Carson, in closing, was glad that what he had said had brought out so interesting a discussion. In reply to Dr. Fischel he said that he had seen a number of cases of cancer of the stomach where the symptoms were latent, where the disease had been made out and the patient had passed sometime in comfort, yet that did not alter his opinion that cancer of the stomach should be operated upon as soon as made out, for no one could tell what cases were going to become latent.

The majority of those cases produced great suffering and toward the latter stages the patients would much prefer to die than to exist as they were existing. If they removed the cancer (and it was true that the mortality was being greatly reduced in such operations), the patients got very decided comfort and if there was a metastasis and the patients died with less suffering than if the operation had not been done. He had a case that he expected to operate upon the next week in which all the evidence led him to think there was a malignant trouble engrafted upon gastric ulcer. For several years the patient had been suffering from gastric disturbance and there was occasionally coffee ground vomit. Since July the trouble had increased and the quantity of blood had increased, there was emaciation and all the symptoms of cancer. The tumor was not large and it was freely movable and he had advised removing it if possible, and if not, the making of a gastroenterostomy, for the power of the stomach had been lost and the patient was suffering a great deal of pain and nausea that made life a burden. In spite of the fact that such patients might have a great deal of comfort, he believed that whenever it was possible to remove malignant disease it should be done. Not only great relief came in cancer of the stomach by such a procedure, but he had seen a number of cases of cancer in different parts of the body where he had advised that operation should not be done, but had operated at the urgent request of the patients and these patients had lived years and years in comfort. If even a few patients recovered and lived in comfort he believed they should do the operation when the patients wanted it done. They should not deny the patient that privilege. When all efforts had been made to make a positive diagnosis without success, then an exploratory operation was justified to enable them to operate if necessary before it was too late. If internists would more frequently visit the operating room it would be for the benefit of all and there should be the most hearty co-operation between the surgeon and the internist.

BOOK REVIEWS.

Manual of Operative Surgery. By John Fairbairn Binnie. A. M., C. M. (Aberdeen), Professor of Surgery Kansas City Medical College, Kansas City, Mo., Fellow of the American Surgical Association, Membre de la Societe Internationale de Chirurgie. Six hundred and forty-one pages, with 559 illustrations. Price, \$3.00. P. Blakiston's Son & Co. 1905.

In this excellent little work amputations and ligations and such portion of genito-urinary and rectal surgery as are fully treated in the common text book have been passed over in silence. The book is eminently practical, and covers in a satisfactory manner the field it occupies.

Transactions of the South Dakota State Medical Association for the Years 1903-04. News Printing Company, Aberdeen, S. D.

This volume, bound in paper, 128 pages, contains the transactions of the twenty-second annual meeting, held at Mitchells, S. D., 1903, and the transactions of the twenty-third annual meeting, held at Rudfield, S. D., 1904.

Transactions of the New Hampshire Medical Society of the One Hundred and Thirteenth Anniversary, held at Concord, May 19 and 20, 1904.

This octavo volume of over 300 pages, well bound, in cloth, and containing many remarkably good articles, will become a permanent part of medical history. The Rumford Press,

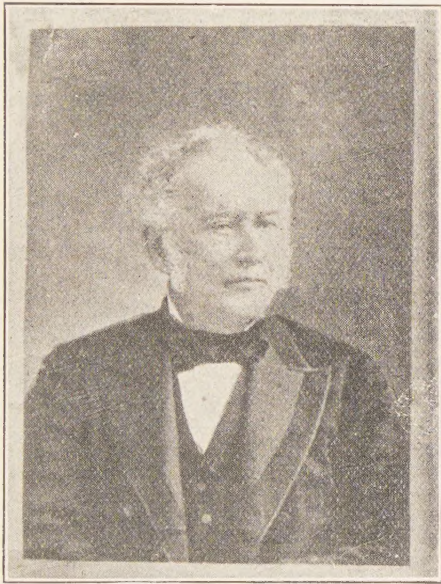
of Concord, is to be congratulated on the excellent presswork and substantial binding.

International Clinics. A Quarterly of Illustrated Clinical Lectures and Especially Prepared Original Articles by Leading Members of the Medical Profession throughout the World. Edited by A. J. O. Kelly, A. M., M. D., Philadelphia. Octavo. Three hundred pages per volume. Illustrated in colors and black and white. Cloth, \$2.00 per volume; \$8.00 per year. Half-leather, \$2.25 per volume; \$9.00 per year. J. P. Lippincott Co.

No practicing physician or surgeon who would be familiar with medical progress should fail to have his name on the permanent list of subscribers. A careful review of Volume IV, Series Fourteen, strengthens our belief that the International Clinics constitutes the most practical, economical and altogether valuable illustrated work of its kind ever offered the profession. Among the contributors to this volume are George Hayem, Adolpha Javal and F. Lejars on Treatment; F. Parker Weber, Solomon Solis-Cohen, Sir Dyce Duckworth, H. Senator and Alexander Crombie on Medicine; E. H. Bradford, Wisner R. Townsend, John Lincoln Porter, W. Arbuthnot Lane, Anthony A. Bowlby and A. Ernest Gallant on Surgery; F. A. L. Lockhart on Gynecology; Daniel R. Brower on Neurology, and Alfred Scott Warthin and Charles F. Craig on Pathology.

BIOGRAPHICAL SKETCHES.

Surgeon's Hall.—Samuel D. Gross, than whom there has been none greater in surgery and medicine, was born near Easton, Pennsylvania, July 8, 1805. His childhood was spent on the farm of his father, Philip Gross. Before the age of six years he conceived the idea of becoming a physician. This idea dominated him through the struggles and trials of his life. He early determined so to study his profession as to be able to meet every emergency, however dif-



ficult or unexpected, and consequently never to send any patient away unless he was in a hopeless condition. At seventeen he entered the office of a country practitioner. At nineteen he was working under the tuition of Dr. Joseph K. Swift, of Easton. He later matriculated at Jefferson College, and became a private student of Dr. George McClelland, then professor of surgery of that institution. In 1828 he received his medical degree, and

opened an office in Philadelphia and set himself dilligently to translations and original work. Inside of a year he had translated Bayle and Hoolar's General Anatomy, Hildenbrand on Typhoid Fever, Hatin's Manual of Obstetrics and Tavernier's Operative Surgery. In 1830 he published his "Treatise on Anatomy, Physiology and Diseases of the Bones and Joints." Practice came slowly, and inside of two years he returned to Easton. There he took the brave young wife who had consented to share his privations and his struggles, and who, during their long and singularly happy wedded life, rejoiced with him in the successes which from time to time crowned his efforts. In 1833 he went to Cincinnati to accept the position of demonstrator of anatomy in the Medical College of Ohio. In 1835 he accepted the chair of pathological anatomy in the medical department of Cincinnati College, and in 1840 the chair of surgery at Louisville. In 1856 he became professor of surgery at Jefferson Medical College. Early in the winter of 1883-4 his health began to fail markedly, and his family, in alarm, induced him in March to go to Atlantic City to recuperate. He returned to Philadelphia in a few days completely worn out, and steadily grew worse until on the 6th of May he died. The American Medical Association was then in session at Washington, D. C., and the following were appointed a committee to "take such action as it might deem proper:" Drs. Austin G. Flint, T. G. Richardson, L. A. Sayre, John H. Packard, F. H. Hamilton, Moses Gunn, W. T. Briggs and I. M. Hays.

COUNTY SOCIETIES IN AFFILIATION WITH THE STATE MEDICAL ASSOCIATION.

COUNTY.	PRESIDENT.	ADDRESS OF PRESIDENT.	SECRETARY.	ADDRESS OF SECRETARY.
Adair.....	James Hanks.....	Brashear.....	E. C. Grim.....	Kirksville.
Atchison.....	E. E. Richards.....	Tarkio.....	A. McMichael.....	Rockport.
Audrain.....	C. A. Rothwell.....	Mexico.....	E. S. Cave.....	Mexico.
Bates.....	A. E. Lyle.....	Butler.....	E. N. Chastian.....	Rich Hill.
Boone.....	J. E. Thornton.....	Columbia.....	W. A. Norris.....	Columbia.
Buchanan.....	P. I. Leonard.....	St. Joseph.....	Chas. W. Fassett.....	St. Joseph.
Butler.....	W. A. Kendall.....	Poplar Bluff.....	J. J. Norwine.....	Poplar Bluff.
Caldwell.....	C. C. Leeper.....	Braymer.....	Tinsley Brown.....	Hamilton.
Callaway.....	D. H. Young.....	Fulton.....	J. F. Harrison.....	Fulton.
Camden.....	G. M. Moore.....	Linn Creek.....	G. T. Myers.....	Macks Creek.
Cape Girardeau.....	H. L. Cunningham.....	Cape Girardeau.....	E. P. Porterfield.....	Cape Girardeau.
Carroll.....	W. C. Baird.....	Bogard.....	R. F. Cook.....	Carrollton.
Cass.....	R. D. Ramey.....	Garden City.....	J. S. Triplett.....	Harrisonville.
Chariton.....	H. C. Tatum.....	Brunswick.....	C. A. Jennings.....	Salisbury.
Clark.....	H. W. Harris.....	Winchester.....	A. C. Bridges.....	Kahoka.
Clay.....	L. J. Jones.....	Linden.....	F. H. Matthews.....	Liberty.
Cole.....	J. P. North.....	Jefferson City.....	G. Ettmueller.....	Jefferson City.
Cooper.....	P. L. Hurt.....	Boonville.....	R. S. Holman.....	Boonville.
Crawford.....	W. A. Metcalf.....	Steeleville.....	A. H. Horn.....	Steeleville.
Current River.....	Frank Hyde.....	Eminence.....	J. A. Chilton.....	Van Buren.
Daviess.....	J. D. Dunham.....	Pattonsburg.....	M. A. Smith.....	Gallatin.
Dunklin.....	N. F. Kelley.....	Kennett.....	G. L. Johnson.....	Kennett.
Grundy.....	J. A. Asher.....	Trenton.....	W. D. Fulkerson.....	Trenton.
Henry.....	Jno. H. Britts.....	Clinton.....	F. M. Douglas.....	Clinton.
Holt.....	B. T. Quigley.....	Mound City.....	J. F. Chandler.....	Forest City.
Howard.....	A. W. Moore.....	Fayette.....	C. W. Watts.....	Fayette.
Howell.....	J. W. Bingham.....	Pottersville.....	H. C. Shuttee.....	West Plains.
Iron.....	R. W. Gay.....	Ironton.....	Ira A. Marshall.....	Ironton.
Jackson.....	Robt. T. Sloan.....	Kansas City.....	Max Goldman.....	Kansas City.
Jasper.....	R. L. Neff.....	Joplin.....	J. D. Pifer.....	Joplin.
Johnson.....	M. P. Shy.....	Knobnoster.....	E. H. Gilbert.....	Warrensburg.
John T. Hogden.....	T. H. Duckett.....	Harrisonville.....	T. C. Boulware.....	Foster.
Laclede.....	J. M. Billings.....	Lebanon.....	J. A. McComb.....	Lebanon.
Linn.....	G. N. Lantz.....	Brookfield.....	D. F. Howard.....	Brookfield.
Livingston.....	R. Barney.....	Chillicothe.....	H. M. Grace.....	Chillicothe.
McDonald.....	E. F. Doty.....	Anderson.....	M. L. Sellers.....	Anderson.
McDowell Dist.....	John D. Seba.....	Bland.....	J. W. Nieweg.....	Owensville.
Macon.....	E. S. Smith.....	Macon.....	G. B. Rush.....	Macon.
Madison.....	G. W. Greenwood.....	Fredericktown.....	C. U. Davis.....	Fredericktown.
Maries.....	O. C. Fritts.....	Lois.....	O. N. Schudde.....	Vienna.
Marion.....	R. H. Goodier.....	Hannibal.....	F. Janet Reid.....	Hannibal.
Mercer.....	H. P. Chesmore.....	Princeton.....	C. R. Buren.....	Princeton.
Miller.....	S. P. Hickman.....	Ulman.....	G. D. Walker.....	Eldon.
Mississippi.....	A. J. Martin.....	East Prairie.....	W. P. Howle.....	Charleston.
Moniteau.....	J. B. Stewart.....	Clarksburg.....	W. R. Patterson.....	Tipton.
Monroe.....	G. B. Dysart.....	Paris.....	W. B. A. McNutt.....	Monroe City.
Morgan.....	W. L. Hatler.....	Barnett.....	J. T. Beale.....	Versailles.
Nodaway.....	J. A. Larrabee.....	Barnard.....	F. R. Anthony.....	Maryville.
Newton.....	J. W. Lamson.....	Neosho.....	Horace Bowers.....	Neosho.
Pemiscott.....	D. B. Crowe.....	Caruthersville.....	J. G. Luten.....	Caruthersville.
Perry.....	T. M. Hudson.....	Perryville.....	F. M. Vellels.....	Perryville.
Pettis.....	W. C. Overstreet.....	Sedalia.....	W. S. Shirk.....	Sedalia.
Phelps.....	W. H. Breuer.....	St. James.....	S. L. Baysinger.....	Rolla.
Platte.....	R. P. Davis.....	Woodruff.....	G. C. Coffey.....	Platte City.
Putnam.....	C. H. Carryer.....	Hartford, Mo.....	T. A. Townsend.....	Unionville.
Ralls.....	O. B. Hicklin.....	New London.....	T. J. Downing.....	New London.
Randolph.....	D. A. Barnhart.....	Huntsville.....	S. C. Adams.....	Huntsville.
Ray.....	Chas. B. Shotwell.....	Richmond.....	L. D. Greene.....	Richmond.
Reynolds.....	J. M. Lowery.....	Centerville.....	T. W. Chilton.....	Corridon.
Saline.....	D. C. Gore.....	Marshall.....	D. F. Bell.....	Marshall.
St. Clair.....	W. Cline.....	Appleton City.....	E. D. Miles.....	Osceola.
St. Genevieve.....	M. Andre.....	St. Genevieve.....	F. E. Hinch.....	St. Genevieve.
St. Louis.....	F. L. Henderson.....	Century Bldg.....	T. A. Hopkins.....	Century Bldg.
St. Louis Co.....	H. G. Wyer.....	Kirkwood.....	H. T. Randle.....	Clayton.
Schuyler.....	J. T. Jones.....	Queen City.....	H. E. Gerwig.....	Downing.
Scotland.....	W. E. Alexander.....	Memphis.....	O. F. Pile.....	Memphis.
Shelby.....	H. C. Vaughn.....	Shelbina.....	A. M. Wood.....	Lentner.
Stoddard.....	D. R. Corbin.....	Bloomfield.....	Jno. Ashley.....	Bloomfield.
Sullivan.....	J. C. Kessenger.....	Milan.....	J. S. Montgomery.....	Milan.
Washington.....	J. A. Eaton.....	Belgrade.....	W. S. Smith.....	Belgrade.
Wayne.....	L. M. Pettit.....	Greenville.....	I. N. Barnett.....	Piedmont.

MEETINGS OF COUNTY MEDICAL SOCIETIES.

COUNTY.	DATE OF MEETING.
Adair.....	Monthly.
Atchison.....	Quarterly. January, April, July, October.
Audrian.....	Monthly. First Monday.
Bates.....	Quarterly. Last Thursday in Feb., May, Aug. and Nov.
Boone.....	Monthly. First Monday.
Buchanan.....	Semi-Monthly. First and Third Friday.
Butler.....	Monthly.
Caldwell.....	Quarterly. July, October, January, April.
Callaway.....	Monthly. Second Thursday.
Camden.....	Quarterly. January, April, July, October.
Cape Girardeau.....	Monthly.
Carroll.....	Monthly. Second Tuesday.
Cass.....	Quarterly. First Thursday of March, June, Sept., Dec.
Chariton.....	Monthly. Last Thursday.
Clark.....	1st Mondays Feb., Apr., June, Aug., Oct., Dec.
Clay.....	Monthly. Last Monday.
Cole.....	Quarterly. Second Thursday of Jan., Apr., July, Oct.
Cooper.....	Monthly. First Tuesday.
Crawford.....	Quarterly. First Tuesday. Apr., July, Oct., Jan.
Current River.....	Quarterly. August, November, February, May.
Daviess.....	Monthly.
Dunklin.....	Monthly.
Grundy.....	Quarterly. July, October, January, April.
Henry.....	Monthly. Second Tuesday.
Holt.....	Quarterly. January, April, July, October.
Howard.....	Monthly. Third Tuesday.
Howell.....	First Thursday of Dec., Feb., Apr., June, Aug., Oct.
Iron.....	Monthly. First Saturday.
Jackson.....	Semi-Monthly. Second and Fourth Thursdays.
Jasper.....	Semi-Monthly. First and Third Mondays.
Johnson.....	Quarterly. June, September, December, March.
John T. Hodgen.....	Quarterly. October, January, April, July.
Laclede.....	Semi-Annually. First Mondays May and November.
Linn.....	Quarterly. October. January, April, July.
Livingston.....	Monthly. Second Thursday.
McDonald.....	Monthly. First Wednesday.
McDowell District.....	Semi-Annually. Fourth Thursday in Oct. and Apr.
Macon.....	Monthly. On or before full moon, Tuesday, 10 a. m.
Madison.....	Semi-Monthly. First and Third Monday.
Maries.....	Quarterly. First Thursday of Feb., May, Aug., Nov.
Marion.....	Monthly. First Friday.
Mercer.....	Monthly. Second Thursday.
Miller.....	Quarterly. First Thursday. March, June, Sept., Dec.
Mississippi.....	Monthly. First Monday.
Moniteau.....	Quarterly. March, June, September, December.
Monroe.....	Quarterly. First Tuesday of April, July, October, Jan.
Morgan.....	Quarterly. First Wed. of March, June, Sept., Dec.
Newton.....	Monthly. Second Tuesday.
Nodaway.....	Monthly. Second Tuesday.
Pemiscott.....	Monthly.
Perry.....	Monthly.
Pettis.....	Monthly.
Phelps.....	Quarterly. March, June, September, December.
Platte.....	Monthly. First Wednesday.
Putnam.....	Monthly. First Wednesday.
Ralls.....	Quarterly. January, April, July and October.
Randolph.....	Monthly.
Ray.....	Monthly. Third Wednesday.
Reynolds.....	Quarterly. January, March, June, October.
Saline.....	Monthly. Second Tuesday.
St. Clair.....	Quarterly. Second Tues. of March, June, Sept., Dec.
St. Genevieve.....	Monthly.
St. Louis.....	Weekly. Saturdays.
St. Louis County.....	Monthly. Second Wednesday.
Schuyler.....	Semi-Monthly. July and December.
Scotland.....	Monthly. Second Tuesday.
Shelby.....	Quarterly. June, September, December, March.
Stoddard.....	First Wednesday in March, June, Sept. and Dec.
Sullivan.....	Monthly.
Washington.....	Monthly. First Saturday.
Wayne.....	Monthly.

AMERICAN MEDICAL ASSOCIATION

Next Annual Meeting at Portland, Oregon, July 11th to 14th, 1905.

President-Elect: LOUIS S. McMURTRY, Louisville, Ky.

President: JOHN H. MUSSER, Philadelphia, Pa.

First Vice-President: EDWARD JACKSON, Denver, Colo.

Second Vice-President: JAMES HALL BELL, San Antonio, Texas.

Third Vice-President: F. C. SHATTUCK, Boston, Mass.

Fourth Vice-President: B. C. PENNINGTON, Atlantic City, N. J.

Secretary and Editor: GEORGE H. SIMMONS, 103 Dearborn Ave., Chicago.

Treasurer: FRANK BILLINGS, Chicago.

MISSOURI STATE MEDICAL ASSOCIATION.

Next Annual Meeting, Excelsior Springs, May 16, 17 and 18, 1905.

President: JABEZ N. JACKSON, Kansas City.

Vice-Presidents:

S. M. BROWN, Monroe City; H. W. LATHAM, Latham; T. M. POTTER, St. Joseph;
W. S. THOMPSON, Armstrong; J. C. ROGERS, Kansas City.

Secretary: C. M. NICHOLSON, St. Louis.

Assistant Secretary: E. J. GOODWIN, St. Louis.

Treasurer: J. FRANKLIN WELCH, Salisbury.

STANDING COMMITTEES.

Committee on Scientific Work:

C. M. NICHOLSON, Chairman; J. N. FRANKENBURGER and M. P. OVERHOLSER.

Publication Committee:

C. M. NICHOLSON, Chairman; C. LESTER HALL, WOODSON MOSS, ROBERT T. SLOAN, F. J. LUTZ, M. P. OVERHOLSER and L. A. TODD.

Committee on Public Policy and Legislation:

J. N. JACKSON, Chairman; C. M. NICHOLSON, HERMAN E. PEARSE, FRANK J. LUTZ and TINSLEY BROWN.

Committee on Medical Education:

C. M. JACKSON, FRANK HALL and T. C. WITHERSPOON.

Committee on Arrangements:

T. N. BOGART, Chairman; J. T. RICE, Secretary; I. J. JONES, F. H. MATTHEWS,
J. M. ALLEN, J. H. ROTHWELL, GALVIN ATKINS, J. J. RICE,
W. L. WYSONG and ERNEST LOWREY.

COUNCILLOR DISTRICTS AND LIST OF UNORGANIZED COUNTIES.

FIRST DISTRICT.—F. B. HILLER; Knox, Lewis.

SECOND DISTRICT.—J. B. BRUMMALL; solidly organized.

THIRD DISTRICT.—E. H. MILLER; Clinton, DeKalb, Gentry, Harrison, Worth.

FOURTH DISTRICT.—C. H. WALLACE; Andrew.

FIFTH DISTRICT.—L. W. DALLAS; solidly organized.

SIXTH DISTRICT.—WOODSON MOSS; Montgomery, Warren and Pike.

SEVENTH DISTRICT.—W. B. DORSETT; St. Charles, Lincoln.

EIGHTH DISTRICT.—F. J. LUTZ; Franklin, Gasconade.

NINTH DISTRICT.—B. M. HYPES; solidly organized.

TENTH DISTRICT.—J. J. NORWINE; Scott, New Madrid, Bollinger, Center, Ripley,
Jefferson, Francois.

ELEVENTH DISTRICT.—W. S. ALLEE; Osage.

TWELFTH DISTRICT.—R. D. HAIRE; Benton, Lafayette.

THIRTEENTH DISTRICT.—M. P. OVERHOLSER; solidly organized.

FOURTEENTH DISTRICT.—A. R. SNYDER; Berry, Lawrence, Dade, Barton, Cedar,
Vernon.

FIFTEENTH DISTRICT.—Hickory, Stone, Taney, Greene, Christian, Dallas, Polk.

SIXTEENTH DISTRICT.—R. L. JOHNSON; Pulaski, Webster, Ozark, Dent, Texas, Wright,
Douglas, Oregon.